FINAL UNDERGROUND STORAGE TANK REMOVAL AND SITE ASSESSMENT REPORT

EVANS AREA, FORT MONMOUTH WALL TOWNSHIP, NEW JERSEY (VOLUME 3 OF 3)

Submitted to:



Directorate of Public Works, Fort Monmouth and the U.S. Army Materiel Command Environmental Compliance Services Contract No. DAAA08-94-D0007 Delivery Order No. 00069

Submitted by:



Tetra Tech EM Inc.

December 2000

United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

> Building 9100 Camp Evans Area

NJDEP UST Registration No. 90029-31

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- Appendix D UST Disposal Certificate
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EXECUTIVE SUMMARY

UST Closure

On December 8, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-31 (Fort Monmouth Identification No. 9100), was located south of Building 9100 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the center of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). No holes were noted in the UST and the only evidence of potentially contaminated soil was observed surrounding the fill port. Samples collected at the time the UST was removed contained non-detectable concentrations of total petroleum hydrocarbons (TPHC). The total amount of soil removed from the excavation was 10 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9100 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in soil do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 90029-31 at Building 9100.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-31, was closed at Building 9100 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on December 8, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 90029-31 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that no significant historical discharges are associated with UST No. 90029-31 or associated piping.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9100 is located in the main section of the Camp Evans area of the Fort Monmouth Army Base (adjacent to Building 9039) as shown in Figure 1. UST No. 90029-31 was located south of Building 9100 and associated piping ran approximately 7 feet north from the UST to Building 9100. The UST fill port area was located directly above the center of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9100.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Prior to UST decommissioning activities, surficial soil was excavated to expose the UST and associated piping. All free product present in the piping was purged with compressed air into the UST. The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. After the removal of associated piping, soil excavation continued to uncover the UST. Once the UST was uncovered, SMC cut open the tank with a nonsparking pneumatic cutter and the remaining contents of the tank were removed with drum vacuum equipment. SMC completed cleaning the UST by wiping the interior out with oil absorbent pads.

After the UST was cleaned, it was removed from the excavation, staged on polyethylene sheeting, and examined for holes. No holes or punctures were observed by the Tetra Tech subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. No evidence of contamination was observed or detected by the PID/FID except for soil located adjacent to the UST fill port. Visual and PID/FID soil screening was also performed along piping associated with the UST. No contamination was noted anywhere along the piping length.

The sludges and residues removed from the UST were transported by Lorco Petroleum Company to its NJDEP-approved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix E provides a copy of the waste manifest for the off-site transport of the tank contents.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons Inc., in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix D provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number
- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results and total petroleum hydrocarbon (TPHC) results from post-excavation soil samples, soil adjacent to the UST fill port was contaminated. This soil was removed to the staging area for disposal off site at a later date and the clean excavated soil and imported clean fill were used to backfill the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: Kevin J. Phelan Employer: Tetra Tech EM Inc. Telephone No.: (973) 983-0507 NJDEP Certification No.: 0018436
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461

 Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900
 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from around the UST and associated piping, as well as the UST excavation sidewalls and bottom, did not exhibit any evidence of potential contamination at the time of the UST removal; however, soil adjacent to the UST fill port did exhibit indications of contamination and was transported to the soil staging area.

2.2 SOIL SAMPLING

On December 8, 1997, after UST removal, post-excavation soil samples 9100B1, 9100B2 (Duplicate of 9100B1), 9100B3, 9100E, 9100S, 9100W, 9100N, and 9100RF/VL were collected from seven locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 7.5 to 8-feet below ground surface (bgs). The sidewall samples were collected from 7 to 7.5-feet bgs. Sample 9100RF/VL was collected from next to the concrete sidewalk surrounding Building 9100 along the former return/feed line piping length of the excavation, which was approximately 7 feet long. Sample 9100RF/VL was collected from 1 to 1.5-feet bgs. In addition, on December 9, 1997, samples 9100OBS1 and 9100OBS2 were collected from the overburden soil piles to verify that the piles were not contaminated and could be used as clean backfill for the excavation. All samples were analyzed for TPHC and total solids.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from seven locations on December 8, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

All of the post-excavation soil samples collected on December 8, 1997, from the UST excavation, from below piping associated with the UST, and from the overburden soil piles contained non-detectable concentrations of TPHC.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 9100 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, do not exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 90029-31 at Building 9100.

Legend of Sample Identifications Camp Evans Area Wall Township, New Jersey

	Wai Township, New Sersey
В	Sample from the bottom of the excavation
Ŵ	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
N	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
	above).
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil").
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
	Samples was collected from a second remote fill line for a particular UST evenuation
RR1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST 0105ACTD1	Above ground storage tank
	Sample collected at the former location of an AST at the specified building
SD	Sample collected from a storm drain
SW	Sample collected from a sidewall of a remedial excavation
CTR	Copper fubing run
CSP-1	Clean soil nile

.

Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
		10/07	0-1	De et Franzisking	TRUC	
9100RF/VL	12/8/97	12/9/97	Soli	Post-Excavation	IPRO	
9100B1	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100B2	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100B3	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100E	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100S	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100W	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100N	12/8/97	12/9/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100OBS1	12/9/97	12/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9100OBS2	12/9/97	12/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Note:

lable 2
Post-Excavation Soil Sampling Results
Building 9100, Camp Evans Area
Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
0100DEA/I	2204.01	12/8/07	12/0/07	TPHC	161	ND	10.000	No
9100KF/VL	3204.01	12/0/97	12/0/07	TPHC	169	ND	10.000	No
910001	3204.02	12/8/07	12/9/97	TPHC	167	ND	10,000	No
910082	3204.03	12/8/97	12/9/97	TPHC	162	ND	10,000	No
910053 9100E	3204.04	12/8/97	12/9/97	TPHC	164	ND	10,000	No
9100L 0100S	3204.00	12/8/97	12/9/97	TPHC	164	ND	10,000	No
91000	3204.00	12/8/97	12/9/97	TPHC	162	ND	10,000	No
9100W	3204.08	12/8/97	12/9/97	TPHC	172	ND	10,000	No
91000RS1	3206 10	12/9/97	12/10 - 11/97	TPHC	166	ND	10,000	No
9100OBS2	3206.11	12/9/97	12/10 - 11/97	TPHC	165	ND	10,000	No

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

TPHC Total petroleum hydrocarbons





APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 90029-31

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(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area							
Facility Street Address: Buil	ding 1207, DCSOPS-BID						
Municipality: <u>Wall Townshi</u> j	p County : <u>Monmouth</u>						
Block: 240, 241 and 242 L	ot(s): <u>240 (55.01, 55.02, 55.03 & 55.04); 241 (1), 242 (1.01 & 1.02</u>						
Telephone Number : (732) 23	<u>9-2427</u>						
B. Owner (RP)'s Name: U	S Army, CECOM						
Street Address: DCSOPS-E	BID, Bldg. 1207 City : Fort Monmouth						
State: <u>NJ</u> Zip: <u>07703</u>	Telephone Number : (732) 532-5052						
C . (Check as appropriate)	D. (Complete all that apply)						
• Site Investigation Report (SIR) \$500 Fee	 Assigned Case Manager : <u>Mr. Ian Curtis</u> UST Registration Number : <u>(7 digits)</u>: 90029 - <u>3</u> Incident Report Number (10 or 12 digits): 						
Remedial Investigation	Remedial Investigation Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>						
Report (RIR) \$1000 Fee							
E. Certification by the Subsurface Evaluator:							
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes							
Name: Kevin J. Phelan Signature: <u>Kerrin J. Phelan</u> UST Cert. No.: <u>0018436</u>							
Firm: Tetra Tech EM, Inc. Firm's UST Cert. Number: US00457							
Firm Address: 1 Bank Street, Suite 103 City: Rockaway							
State: NJ Zip: 07866 Telephone Number : (973) 9830507, Ext. 230							

State:	NJ Zip: 07866 Telephone Number : (973) 9830507, Ext. 230
(NOTE et seq.	:: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-2' .)
F. c	ertification by the Responsible Party(ies) of the Facility:
The fol	llowing 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
2. 3.	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): Mr. Charles Appleby
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	\bigcirc / \bigcirc
	Signature:
	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703

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APPENDIX B

PHOTOGRAPHS OF UST CLOSURE

UST NO. 90029-31



PHOTO 1: View of UST-9100 after the completion of tank cleaning activities (looking north/northeast).



PHOTO 2: View of UST-9100 being removed from the ground (looking northwest).



PHOTO 3: View of the sampling locations in the UST-9100 excavation (looking east).



PHOTO 4: View of UST-9100 staged on the west side of Building 9100 awaiting disposal and labeled with all required information.

APPENDIX C

SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 90029-31

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

Client :	U.S. Army			Lab. ID # :		3204	
	DPW. SELFM-	PW-EV		Date Rec'd:		09-Dec-97	
	Bldg. 173			Analysis Sta	09-Dec-97		
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	09-Dec-97	
Analysis:	OQA-QAM-025			UST Reg. #:			
Matrix:	Soil			Closure #:			
Analyst:	D.DEINHARDI	ſ		DICAR #:			
Ext. Meth:	Shake			Location #:		BLDG. 9100	
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)	
3204.01	9100-RF/VL	1.00	15.52	94.19	161	ND	
3204.02	9100-B1	1.00	15.05	92.45	169	ND	
3204.03	9100-B2	1.00	15.17	92.69	167	ND	
3204.04	9100-B3	1.00	15.39	94.08	162	ND	
3204.05	9100-E	1.00	15.39	92,85	164	ND	
3204.06	9100-S	1.00	15.32	93.31	164	ND	
3204.07	9100-W	1.00	15.50	93.65	162	ND	
3204.08	9100-N	1.00	15.02	90.94	172	ND	
		_					
					1		
	1						
						1	
METHOD BLANK	9-Dec-97	1.00	15.00	100.00	157	ND	
METHOD BLANK	10-Dec-97	1.00	15.00	100.00	157	ND	

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

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

Client :	U.S. Army	Lab. ID # :	3206
	DPW. SELFM-PW-EV	Date Rec'd:	10-Dec-97
	Bldg. 173	Analysis Start:	10-Dec-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	11-Dec-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS. 9019
			9090, 9100

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3206.01	9019-EL1	1.00	15.31	84.44	182	3164.29
3206.02	9019-B4	1.00	15.39	98.60	155	ND
3206.03	9019-B5	1.00	15.09	96.02	162	ND
3206.04	9019-W2	1.00	15.19	88.84	174	ND
3206.05	9019-N2	1.00	15.51	84.04	180	ND
3206.06	9019-S2	1.00	15.24	85.59	180	ND
3206.07	9019-E2	1.00	15.14	93.86	165	ND
3206.08	9090-OBS1	1.00	15.04	88.17	177	244.42
3206.09	9090-OBS2	1.00	15.90	88.59	167	228.92
3206.10	9100-OBS1	1.00	15.07	93.93	166	ND
3206.11	9100-OBS2	1.00	15.75	90.31	165	ND
1						
	-		1			
METHOD BLANK	10-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

APPENDIX D

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UST DISPOSAL CERTIFICATE

UST NO. 90029-31

	Antoder franking Board" The Drawley Board" Antonia Control of Street		RECRIDER ITEM # BLN74
		STRAIGHT BILL OF LADING ORIGINAL - NOT NEGOTIABLE	BHARM NO23
		SMC ENVIRONMENTAL SERVICES G.	ROUP Units Na
	Mazza+So	ins inc und Buildin	ny Camp Evans a 9100
n Ganz I	Tixton Fal	15, NJ 2051107753 0040 Wall	NJ 0.7719
	Anne Ne States Inte	Red efferting Brinder of Artista.	Austin Austin (Svoling be (Svoling be
	0-60	Sec Pony	
	······	1-1,000 Gallon U.S.T Sh	
		Clam I	
	<u>¥</u>	uilding# 9100 和化 4- 90029-31	
	NEMIT C.Q.D. TO: 4/2787E85	COD Arni: \$	C.O.D. FFE: PREPAID S COLLECT C
	NCTE - Where they sate in thereinfert at before, diferent are regarded to picke specificarly in un long the appel or disclosed refere in the preparity	This is to mailly that the classes - neural metaricle and property	TOTAL Start is any definered TOTAL CHARGES:
	The spaced on protocol only of the property is hereby specificity stable by the property is to be not discussing \$	Separates	
	RECEIVED, subject to the classifications an of spotential of packaged universe, reprint, so in postassion of the property which the contac to returnity express as its scale cannot of all of survice to be posteringd herminals shall be au Rivipur hereby caching that he is farther at for historial and the market.	d Javille is affect on the disk of the interest the Bill of Ladrey, the property described shore is a angesed, and sessing as industed above which pad earlier the word castler being undertifood is cell agrees to carry to be sound place of delivery at sold desiredon, if on its read, ofference is any of, and property our of ar any parties of and reads of desiredon, if on its read, ofference is any of, and property our of ar any parties of and reads of desiredon, if on its read, ofference and the bill of fedray terms and conditions is the governing classification and the dele of strip is the bill of leading terms and conditions in the governing descriptions and the sold form and it of the bill of advector is an and conditions in the governing descriptions and the sold form and in the bill of advector is an and conditions in the governing descriptions and the sold form and an effective bill of advector is and conditions in the governing description and the sold form and the sold sold of a sold the sold of the sold form and and the sold form and	Inpatent goad deler, except as noted (contents and conortion treathout his contract as meaning any pircent or comparison ordering a proteor catching on the rosts is said definition. It have the interested in sith any of said property, their every ment. I conducts are betaby agreed to by the shipper and accepted
	SHAPPER U.S. ACMY	amp Evans CARRI SMC FAVIL	ONMENTALA SERVICES GROUP
	ren David H. A	Janues (Agent) Marie C	Sycal 12
	New and Wite designed Hardeland Statistics	And in The stort the Code of Federal Regulations.	7_0 REATA The Drawing Seard, P.D. Sen 2844, Harderd, CT 08484-2844 Mintel St. U.S.A.

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M922318: 3261

SMC Environmental Services Group A Subscriptory of Science Management Corporation

P.O. Box 859 Valley Forge. Pennsylvania 19482 Telephone (610) 265-2700

bv:



This letter is to confirm that the vessel/vessels at the above referenced location has been physically entered (if necessary), degreased, washed/cleaned, and the material contained within has been completely removed and properly disposed. As of 3:00 A.M./R.M. on 12/8/97, the above said vessel is certified gas free and has been cleaned following recommended procedures in API PUBLICATION 2015. Due to conditions that SMC Environmental Services Group has no control over, this certification is valid only until the vessel is received by the designated steel recycling facility. SMC Environmental Services Group will not be held liable for any damages which may occur after certification.

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

Signature

e Manager Print or Type Name Here

APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 90029-31

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GENERATOR CERTIFICATION

I hereby certify to the best of my knowledge that the waste described on Hazardous Waste Manifest No. 4779 dated 123107

is generated by one or more of the following processes and does not contain more than 2 ppm polychlorinated biphenyls (P.C.B.'s) and does not display any characteristic or contain any hazardous constituents other than for which waste oils are listed in New Jersey.

- X721: Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages.
- X722: Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks.
- X723: Waste oil and bottom sludge generated by gasoline stations when gasoline and oil tanks are tested, cleaned or replaced.
- X724: Waste petroleum oil generated when tank trucks or other vehicles or mobile vessels are cleaned, including, but not limited to, oil ballast water from product transport units of boats, barges, ships or other vessels.
- X725: Oil spill cleanup residue which: A. is contaminated beyond saturation; or B. the generator fails to demonstrate that the spill material was not one of the listed hazardous waste oils.
- X726: The following used and unused waste oils: metal working oils; turbine lubricating oils, diesel lubricating oils, and quenching oils.
- X728. Bottom sludge generated from the processing, blending, and treatment of waste oil in waste oil processing facilities.

*This used oil product was tested on site, before pumping with a dexsil C.D.T. test kit. Results: _____ PPM halogens.

I am duly authorized to sign said certification.

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Address AND SAKE PHEN FORTMONDEN NO 0703
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TitleEHVIRONMANTH THYLNER
Date 11,6,47

United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 9116 Camp Evans Area

NJDEP UST Registration No. 192468-3

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Table 1	Summary of Post-Excavation Sampling Activities
Table 2	Post-Excavation Soil Sampling Results

FIGURES

Figure 1	Building 9116 - UST Removal Location Map
Figure 2	Building 9116 - UST Removal and Soil Sample Locations

APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of UST Closure
- Appendix C Soil Sample Analytical Data Package
- Appendix D UST Disposal Certificate
- Appendix E Waste Manifest for Off-site Transport of UST Contents

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EXECUTIVE SUMMARY

UST Closure

On September 19, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-3 (Fort Monmouth Identification No. 9116), was located north of Building 9116 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the western end of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). One pinhole was noted in the side of the UST; however, the only evidence of potentially contaminated soil was observed surrounding the fill port and the western end of the tank. Samples collected at the time the UST was removed contained total petroleum hydrocarbons (TPHC) concentrations ranging from non-detect to 324.09 milligrams per kilogram (mg/kg). The total amount of soil removed from the excavation was 5 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9116 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in remaining soil do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 192468-3 at Building 9116.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-3, was closed at Building 9116 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on September 19, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 192468-3 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that no significant historical discharges are associated with UST No. 192468-3.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9116 is located in the Diana Radar Section of the Camp Evans area of the Fort Monmouth Army Base as shown in Figure 1. UST No. 192468-3 was located north of Building 9116 and associated piping ran approximately 14 feet southwest from the UST to Building 9116. The UST fill port area was located directly above the western end of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9116.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Prior to UST decommissioning activities, surficial soil was excavated to expose the UST and associated piping. All free product present in the piping was purged with compressed air into the UST. The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. After the removal of associated piping, soil excavation continued to uncover the UST. Once the UST was uncovered, SMC cut open the tank with a nonsparking pneumatic cutter and the remaining contents of the tank were removed with drum vacuum equipment. SMC completed cleaning the UST by wiping the interior out with oil absorbent pads.

After the UST was cleaned, it was removed from the excavation, staged on polyethylene sheeting, and examined for holes. One pinhole was observed on the side of the UST by the Tetra Tech site manager and the SMC subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. No evidence of contamination was observed or detected by the PID/FID except for soil located adjacent to the UST fill port. Visual and PID/FID soil screening was also performed along piping associated with the UST. No contamination was noted anywhere along the piping length.

The sludges and tank residues removed from the UST were transported by Lorco Petroleum Company to its NJDEP-approved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix E provides a copy of the waste manifest for the off-site transport of the tank contents.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons, Inc. in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix D provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number
- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results, soil adjacent to the fill port and the western end of the UST was contaminated. This soil was removed to the staging area for disposal off site at a later date and the clean excavated soil and imported clean fill were used to backfill the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: David H. Daniels Employer: SMC Environmental Services Group Telephone No.: (215) 788-7844
 NJDEP Certification No.: 0010279
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461
Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from around the eastern two-thirds of the UST and associated piping, as well as the UST excavation sidewalls and bottom, did not exhibit evidence of contamination at the time of the UST removal; however, soil excavated from the area of the fill port and the western one-third of the UST did exhibit indications of contamination and was stockpiled separately (prior to transport to the staging area).

2.2 SOIL SAMPLING

On September 19, 1997, after UST removal, post-excavation soil samples 9116B1, 9116B2, 9116B3, (Duplicate of 9116B2), 9116S, 9116W, 9116E, 9116N, and 9116RF were collected from seven locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 4.5 to 5-feet below ground surface (bgs). The sidewall samples were collected from 4 to 4.5-feet bgs. Sample 9116RF was collected from next to Building 9116 along the former return/feed line piping length of the excavation, which was approximately 14 feet long. Sample 9116RF was collected from 0.5 to 1-feet bgs. Samples 9006OBS(A) and 9006OBS(B) were collected from the overburden soil piles to verify that the piles were not contaminated and could be used as clean backfill for the excavation. In addition, sample 9116CSP was collected from a pile of soil that had been adjacent to the fill port and the western end of the UST and sample 9116DS was collected from the overburden site of 8.5 to 9-feet bgs. All samples were analyzed for TPHC and total solids.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from seven locations on September 19, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

One of the post-excavation soil samples collected on September 19, 1997, from the UST excavation and from below piping associated with the UST contained 324.09 mg/kg of TPHC, which is below the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg and the more stringent Fort Monmouth soil cleanup criterion. The remainder of the samples contained TPHC concentrations from non-detect to 243.31 mg/kg.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 9116 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, do not exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 192468-3 at Building 9116.

Legend of Sampic identifications Camp Evans Area Wall Township, New Jersey

•	Wai Township, New Jeisey
в	Sample from the bottom of the excavation
Ŵ	Samples from the west sidewall of the excavation
Е	Samples from the east sidewall of the excavation
Ν	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
	above). Reil leasted directly adjacent to the fill west of the texts (#Fill Dect On iii)
	Soli located directly adjacent to the fill port of the tank ("Fill Port Soli").
	Contaminated soil nile from the LIST-9116 exceptation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
ONEDM	the sample was collected
	Contirmatory sample to contirm that contamination has been removed
	Another designation for a committatory sample Return/feed/vent lines. Lised at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST	Above ground storage tank
9105ASTB1	Sample collected at the former location of an AST at the specified building
DEL	Delineation sample to document the extent of contamination
3D 8W	Sample collected from a storm drain
	Connor tubing run
CSP-1	Clean soil oile
001-1	

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Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
9116RF	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116OBS(A)	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	oqa-qam-025
9116OBS(B)	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116B1	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116B2	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116B3	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116E	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
91165	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116W	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116N	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116CSP	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9116DS	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Building 9116, Camp Evans Area Wall Township, New Jersey

Note:

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9116RF	3004.01	9/19/97	9/22 - 24/97	TPHC	166	240.92	10,000	No
9116OBS(A)	3004.02	9/19/97	9/22 - 24/97	TPHC	156	243.31	10,000	No
9116OBS(B)	3004.03	9/19/97	9/22 - 24/97	TPHC	155	199.57	10,000	No
9116B1	3004.04	9/19/97	9/22 - 24/97	TPHC	159	ND	10,000	No
9116B2	3004.05	9/19/97	9/22 - 24/97	TPHC	166	ND	10,000	No
9116B3	3004.06	9/19/97	9/22 - 24/97	TPHC	166	ND	10,000	No
9116E	3004.07	9/19/97	9/22 - 24/97	TPHC	160	ND	10,000	No
9116S	3004.08	9/19/97	9/22 - 24/97	TPHC	162	324.09	10,000	No
9116W	3004.09	9/19/97	9/22 - 24/97	TPHC	164	ND	10,000	No
9116N	3004.10	9/19/97	9/22 - 24/97	TPHC	159	ND	10,000	No
9116CSP	3004.11	9/19/97	9/22 - 24/97	TPHC	161	224.20	10.000	No
9116DS	3004.12	9/19/97	9/22 - 24/97	TPHC	163	ND	10,000	No

Table 2 Post-Excavation Soil Sampling Results Building 9116, Camp Evans Area Wall Township, New Jersey

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

TPHC Total petroleum hydrocarbons





APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 192468-3

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

	A. Facility Name: US Army, Fort Monmouth, Evans Area					
	Facility Street Address: Build	ling 1207, DCSOPS-BID				
	Municipality: <u>Wall Township</u>	County : <u>Monmouth</u>				
	Block: 240, 241 and 242 Lo	ot(s): <u>240 (55.01, 55.02, 55.03 & 55.04)</u> , <u>241 (1), 242 (1.01 & 1.02</u>				
	Telephone Number : (732) 23	9-2427				
· ·	B. Owner (RP)'s Name: US Army, CECOM					
	Street Address: DCSOPS-BID, Bldg. 1207 City : Fort Monmouth					
	State: <u>NJ</u> Zip: <u>07703</u>	Telephone Number : (732) 532-5052				
	C. (Check as appropriate)	D . (Complete all that apply)				
	• Site Investigation	• Assigned Case Manager : <u>Mr. Ian Curtis</u>				
	Report (SIR) \$500 Fee	 US1 Registration Number : (7 digits): <u>source</u> - <u>19</u> <u>2</u> 4-68 - 3 Incident Report Number (10 or 12 digits): 				
والتدارية والمتعادين	• Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>				
	Report (RIR) \$1000 Fee					
577 + - 4	E. Certification by the Sul	osurface Evaluator:				
	The attached report	conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes				
	Name: Kevin J. Phel	an Signature: Kerin J. Phelan UST Cert. No.: 0018436				
	Firm: Tetra Tech EM, Inc. Firm's UST Cert, Number: US00457					
	Firm Address: 1 Bank Stre	et, Suite 103 City: Rockaway				
	State: <u>NJ</u> Zip: <u>07</u>	866 Telephone Number : (973) 9830507, Ext. 230				

State: NJ	Zip: 07866	Telephone Number : (973) 9830507, Ext. 230
(NOTE: Certifica et seq.)	tion numbers requir	ed only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21
F. Certification	n by the Responsib	le Party(ies) of the Facility:
The following ce	rtification shall be si	gned [according to the requirements of N.J.A.C. 7:14B-1.7(b)]as follows:
1. For a Co	prporation by a perso	on authorized by a resolution of the board of directors to sign the
documen submitted 2. For a par 3. For a mu elected O	nt. A copy of the resol along with the certif tnership or sole propr nicipality, State, feder fficial.	lution, certified as a true copy by the secretary of the corporation, shall be leation; or ietorship, by a general partner or the proprietor, respectively; or ral or other public agency by either a principal executive officer or ranking
	"I cei subr indivi accu false make direc	rtify under penalty of law that I have personally examined and am familiar with the information nitted in this application and all attached documents, and that based on my inquiry of those iduals responsible for obtaining the information, I believe that the submitted information is true, rate, and complete. I am aware that there are significant civil penalties for knowingly submitting , inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I e a written false statement which I do not believe to be true. I am also aware that if I knowingly t or authorize the violation of any statute, I am personally liable for the penalties."
Name (F	Print or Type <u>): Mr.</u>	Charles Appleby
Title: <u>BF</u>	RAC Environmen	tal Coordinator, Evans Area
Olasatus	NJDEP Subsurface	E Evaluator # 2056
Signatur	e	

Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703

Date: November 30, 2000

С

APPENDIX B

PHOTOGRAPHS OF UST CLOSURE UST NO. 192468-3



PHOTO 1: View of UST-9116 prior to excavation (looking south).



PHOTO 2: View of UST-9116 after cleaning the interior (looking north/northwest).



PHOTO 3: View of the sampling locations in the UST-9116 excavation (looking north).



PHOTO 4: View of UST-9116 staged to the south of Building 9062 awaiting removal to Building 9061 (to await permanent disposal) and labeled with all required information.

APPENDIX C

SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 192468-3

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

Client :	U.S. Army			Lab. ID # :		3004
	DPW. SELFM-	PW-EV		Date Rec'd:		19-Sep-97
	Bldg. 173			Analysis Sta	rt:	22-Sep-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	24-Sep-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD7	ſ		DICAR #:		
Ext. Meth:	Shake			Location #:		9116, 9196
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3004.01	9116-RF	1.00	15.62	90.41	166	240.92
3004.02	9116-OBS(A)	1.00	15.66	96.04	156	243.31
3004.03	9116-OBS(B)	1.00	15.86	95.64	155	199.57
3004.04	9116-B1	1.00	15.48	95.59	159	ND
3004.05	9116-B2	1.00	15.52	91.35	166	ND
3004.06	9116-B3	1.00	15.45	91.53	166	ND
3004.07	9116-E	1.00	15.16	96.74	160	ND
3004.08	9116-S	1.00	15.31	94.51	162	324.09
3004.09	9116-W	1.00	15.17	94.55	164	ND
3004.10	9116-N	1,00	15.37	96.12	159	ND
3004.11	9116-CSP	1.00	15.74	92.75	161	224.20
3004.12	9116-DS	1.00	15.65	92.10	163	ND
3004.18	9196-B1	1.00	16.08	94.90	154	15028.64
3004.14	9196-B2	1.00	15.66	96.37	156	221.67
3004.15	9196-B3	1.00	15.39	97.08	157	523.64
3004.16	9196-W	1.00	16.02	98.21	149	183.81
3004.17	9196-S	1.00	15.49	89.64	169	ND
3004.18	9196-E	1.00	15.65	93.42	161	13158.85
3004.19	9196-N	1.00	15.56	96.78	156	18373.32
3004.20	9196-RF	1.00	15.00	91.09	172	482.61
METHOD BLANK	22-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

APPENDIX D

UST DISPOSAL CERTIFICATE UST NO. 192468-3

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SMC Environmental Services Group

A Subadary of Science Management Corporation P.O. Box 859 Valley Forge Petitisylvama 19482 Telephone (610) 265-2700

CERTIFICATE OF NON-HAZARDOUS VESSEL

FACILITY:	Camp Evans (U.S. Army)
	ILIAL NJ	
	Building 911/0	
VESSEL	1,000 gallon steel tant	
	(Formally #2 Fue (Oil))
	· · · · · · · · · · · · · · · · · · ·	;

This letter is to confirm that the vessel/vessels at the above referenced location has been physically entered (if necessary), degreased, washed/cleaned, and the material contained within has been completely removed and properly disposed. As of 3.00 A.M./P.M. on 9/1.09/97, the above said vessel is certified gas free and has been cleaned following recommended procedures in API PUBLICATION 2015. Due to conditions that SMC Environmental Services Group has no control over, this certification is valid only until the vessel is received by the designated steel recycling facility. SMC Environmental Services Group will not be held liable for any damages which may occur after certification.

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

Signature

(site Manager aniel

Print or Type Name Here

APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 192468-3

J	PETROLE	DRCO OM SERVICES	RD1 Box 5A Old Bridge, (908) 721-09 Fax (908) 72	N.J. 0885 00 11-0231	7.	· · · ·	, , .	· · · · · · · · · · · · · · · · · · ·	STANDA COLLEC ORDER F	AD TION FORM	•
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United States Army Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 9162 Camp Evans Area

NJDEP UST Registration No. 192468-4

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	1.2	Underground Storage Tank Excavation And Cleaning	3
	1.3	Underground Storage Tank Transportation And Disposal	3
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3.0	SOIL	SAMPLING RESULTS	6
4.0	CON	CLUSIONS AND RECOMMENDATIONS	6

TABLES

Table 1	Summary of Post-Excavation Sampling Activities
Table 2	Post-Excavation Soil Sampling Results

FIGURES

Figure 1	Building 9162 - UST Removal Location Map
Figure 2	Building 9162 - UST Removal and Soil Sample Locations

APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of UST Closure
- Appendix C Soil Sample Analytical Data Package
- Appendix D UST Disposal Certificate
- Appendix E Waste Manifest for Off-site Transport of UST Contents

EXECUTIVE SUMMARY

UST Closure

On September 17, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-4 (Fort Monmouth Identification No. 9162), was located west of Building 9162 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the southern end of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). No holes were noted in the UST and the only evidence of potentially contaminated soil was observed surrounding the fill port. Samples collected at the time the UST was removed contained total petroleum hydrocarbons (TPHC) concentrations ranging from non-detect to 764.19 milligrams per kilogram (mg/kg). The total amount of soil removed from the excavation was 5 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9162 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in soil do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 192468-4 at Building 9162.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-4, was closed at Building 9162 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on September 17, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 192468-4 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that no significant historical discharges are associated with UST No. 192468-4 or associated piping.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9162 is located in the Diana Radar Section of the Camp Evans area of the Fort Monmouth Army Base as shown in Figure 1. UST No. 192468-4 was located west of Building 9162 and associated piping ran approximately 6 feet east from the UST to Building 9162. The UST fill port area was located directly above the southern end of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9162.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Prior to UST decommissioning activities, surficial soil was excavated to expose the UST and associated piping. All free product present in the piping was purged with compressed air into the UST. The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. After the removal of associated piping, soil excavation continued to uncover the UST. Once the UST was uncovered, SMC cut open the tank with a nonsparking pneumatic cutter and the remaining contents of the tank (approximately 55 gallons) were removed with drum vacuum equipment. SMC completed cleaning the UST by wiping the interior out with oil absorbent pads.

After the UST was cleaned, it was removed from the excavation, staged on polyethylene sheeting, and examined for holes. No holes or punctures were observed by the Tetra Tech site manager and the SMC subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. No evidence of contamination was observed or detected by the PID/FID except for soil located adjacent to the UST fill port. Visual and PID/FID soil screening was also performed along piping associated with the UST. No contamination was noted anywhere along the piping length.

The 55 gallons removed from the UST were transported by Lorco Petroleum Company to its NJDEPapproved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix E provides a copy of the waste manifest for the off-site transport of the 55 gallons of product.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons, Inc. in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix D provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number
- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results, soil adjacent to the UST fill port was moderately contaminated. This soil was removed to the staging area for disposal off site at a later date and the clean excavated soil and imported clean fill were used to backfill the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: David H. Daniels Employer: SMC Environmental Services Group Telephone No.: (215) 788-7844
 NJDEP Certification No.: 0010279
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461

 Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900
 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from around the UST and associated piping, as well as the UST excavation sidewalls and bottom, did not exhibit evidence of contamination at the time of the UST removal; however, soil located adjacent to the UST fill port did exhibit evidence of potential contamination and was transported to the soil staging area.

2.2 SOIL SAMPLING

On September 17, 1997, after UST removal, post-excavation soil samples 9162B1, 9162B2, 9162B3 (Duplicate of 9162B2), 9162W, 9162N, 9162S, 9162E, and 9162RF were collected from seven locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 8 to 8.5-feet below ground surface (bgs). The sidewall samples were collected from 7.5 to 8-feet bgs. Sample 9162RF was collected from next to Building 9162 along the former return/feed line piping length of the excavation, which was approximately 6 feet long. Sample 9162RF was collected from 2 to 2.5-feet bgs. Sample 9162OBS was collected from the overburden soil pile to verify that the pile was not contaminated and could be used as clean backfill for the excavation. In addition, sample 9162FPS was collected from a pile of soil that had been adjacent to the fill port and sample 9162BFP was collected from a pile that had been beneath the fill port. All samples were analyzed for TPHC and total solids.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from seven locations on September 17, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

One of the post-excavation soil samples collected on September 17, 1997, from the UST excavation and from below piping associated with the UST contained 764.19 mg/kg of TPHC, which is below the NJDEP soil cleanup criterion of 1,000 mg/kg, used by Fort Monmouth, which requires either additional soil excavation/removal or volatile organic compound (VOC) sampling. The remainder of the samples contained TPHC concentrations from non-detect to 250.24 mg/kg.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 9162 were below the above mentioned NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg, do not exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 192468-4 at Building 9162.

Identifications د الطلاحة Camp Evans Area Wall Township, New Jersey

В	Sample from the bottom of the excavation
Ŵ	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
Ν	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to
	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil")
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST	Above ground storage tank
9105ASTB1	Sample collected at the former location of an AST at the specified building
DEL	Delineation sample to document the extent of contamination
SU	Sample collected from a storm drain
SVV	Sample collected from a sidewall of a remedial excavation
	Copper tubing run
038-1	

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Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
9162OBS 9162FPS 9162B1 9162B2 9162B3 9162B3 9162W 9162N 9162S 9162E 9162E 9162RF	9/17/97 9/17/97 9/17/97 9/17/97 9/17/97 9/17/97 9/17/97 9/17/97 9/17/97 9/17/97	9/18/97 9/18/97 9/18/97 9/18/97 9/18/97 9/18/97 9/18/97 9/18/97 9/18/97 9/18/97	Soil Soil Soil Soil Soil Soil Soil Soil	Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation	ТРНС ТРНС ТРНС ТРНС ТРНС ТРНС ТРНС ТРНС	OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Building 9162, Camp Evans Area Wall Township, New Jersey

							NJDEP Soil	
Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9162OBS	2999.01	9/17/97	9/18 - 19/97	TPHC	168	ND	10,000	No
9162FPS	2999.02	9/17/97	9/18 - 19/97	TPHC	161	764,19	10,000	No
9162B1	2999.03	9/17/97	9/18 - 19/97	TPHC	162	ND	10,000	No
9162B2	2999.04	9/17/97	9/18 - 19/97	TPHC	162	ND	10,000	No
9162B3	2999.05	9/17/97	9/18 - 19/97	TPHC	162	ND	10,000	No
9162W	2999.06	9/17/97	9/18 - 19/97	TPHC	200	ND	10,000	No
9162N	2999.07	9/17/97	9/18 - 19/97	TPHC	165	ND	10,000	No
9162S	2999.08	9/17/97	9/18 - 19/97	TPHC	156	ND	10,000	No
9162E	2999.09	9/17/97	9/18 - 19/97	TPHC	166	ND	10,000	No
9162RF	2999.10	9/17/97	9/18 - 19/97	TPHC	169	250.24	10,000	No
9162BFP	2999.11	9/17/97	9/18 - 19/97	TPHC	165	ND	10,000	No

Table 2 Post-Excavation Soil Sampling Results Building 9162, Camp Evans Area Wall Township, New Jersey

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

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ND Not detected

TPHC Total petroleum hydrocarbons





APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 192468-4

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area					
Facility Street Address: Building 1207, DCSOPS-BID					
Municipality: <u>Wall Township</u> County : <u>Monmouth</u>					
Block: <u>240, 241 and 242</u> Lo	on(s): 240 (55.01, 55.02, 55.03 & 55.04), 241 (1), 242 (1.01 & 1.02				
Telephone Number : (732) 239	<u>9-2427</u>				
B. Owner (RP)'s Name: US Army, CECOM					
Street Address: DCSOPS-BID, Bldg. 1207 City : Fort Monmouth					
State: <u>NJ</u> Zip: <u>07703</u>	State: NJ Zip: 07703 Telephone Number : (732) 532-5052				
C. (Check as appropriate)	D. (Complete all that apply)				
Site Investigation	 Assigned Case Manager : <u>Mr. Ian Curtis</u> UST Registration Number : (7 digits): \$0029 - ソリンナらスーナ 				
Report (SIR) \$500 Fee	Incident Report Number (10 or 12 digits):				
Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>				
Report (RIR) \$1000 Fee					
E. Certification by the Subsurface Evaluator:					
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes					
Name: Kevin J. Phelan Signature: Kerin J. Phelan UST Cert. No.: 0018436					
Firm: Tetra Tech EM, Inc. Firm's UST Cert. Number: US00457					
Firm Address: 1 Bank Street, Suite 103 City: Rockaway					
State: <u>NJ</u> Zip: <u>07866</u> Telephone Number : <u>(973) 9830507, Ext. 230</u>					

State: (NOTE et seq.	NJ Zip: 07866 Telephone Number : (973) 9830507, Ext. 230 : Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21)
F. c	ertification by the Responsible Party(ies) of the Facility:
The fol	lowing 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
2. 3.	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): Mr. Charles Appleby
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	Signature:
•	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703
	Date: November 30, 2000
APPENDIX B

PHOTOGRAPHS OF UST CLOSURE UST NO. 192468-4



PHOTO 1: View of UST-9162 being uncovered prior to cleaning and removal (looking south).



PHOTO 2: View of the cleaned interior of UST-9162 just prior to removing the tank from the ground (looking southeast).



PHOTO 3: View of the sampling locations in the UST-9162 excavation (looking north).



PHOTO 4: View of UST-9162 staged to the south of Building 9162 awaiting removal to Building 9061 (to await permanent disposal) and labeled with all required information.

APPENDIX C

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SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 192468-4

Client :	U.S. Army			Lab. ID # :	2999		
	DPW. SELFM-	PW-EV		Date Rec'd:		18-Sep-97	
	Bldg. 173			Analysis Sta	18-Sep-97		
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	19-Sep-97	
Ampleraige	004-04M-025			UST Reg. #:			
Analysis:	Coll			Closure #:			
Matrix:		D DEINHARDT					
Analyst:	D.DEINHARD.	D.DEINHARDT Shaka				BLDGS, 9162	
Sample Field ID Dilution Factor			Weight (g)	% Solid (mg/kg		TPHC Result (mg/kg)	
2999.01	9162 OBS	1.00	15.31	91.11	168	ND	
2999.02	9162 FPS	1.00	15.72	92.99	161	764.19	
2999.03	9162 B1	1.00	15.02	96.79	162	ND	
2999.04	9162 B2	1.00	15.11	96.21	162	ND	
2999.05	9162 B3	1.00	15.04	96.34	162	ND	
2999.06	9162 W	1.00	15.18	77.25	200	ND	
2999.07	9162 N	1.00	15.01	95.07	165	ND	
2999.08	9162 S	1.00	15.95	94.43	156	ND	
2999.09	9162 E	1.00	15.74	89.84	166	ND	
2999.10	9162 RF	1.00	15.55	89.23	169	250.24	
2999.11	9162 BFP	1.00	15.81	90.16	165	ND	
2999.12	8162 OBS	1.00	15.20	79.18	195	559.66	
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ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

APPENDIX D

UST DISPOSAL CERTIFICATE UST NO. 192468-4

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Page 2/8

SMC Environmental Services Group

A Selectory of Science Management Corporation P.O. Box 859 Valley Forge: Petitisylvama 19482 Telephone (610) 265-2700

CERTIFICATE OF NON-HAZARDOUS VESSEL

FACILITY: VESSEL D

This letter is to confirm that the vessel/vessels at the above referenced location has been physically entered (if necessary), degreased, washed/cleaned, and the material contained within has been completely removed and properly disposed. As of 3:00 A.M./P.M. on 9/15/97, the above said vessel is certified gas free and has been cleaned following recommended procedures in API PUBLICATION 2015. Due to conditions that SMC Environmental Services Group has no control over, this certification is valid only until the vessel is received by the designated steel recycling facility. SMC Environmental Services Group will not be held liable for any damages which may occur after certification.

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

Signature

Site aniels Manager

Print or Type Name Here

APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 192468-4

	RD1 Box 5A	7	· . · · ·		•
PETROLEGH SERVICES	(908) 721-0900 Fax (908) 721-0231		• • •	COLLECTION ORDER FORM	·
				176848	م مشتر بر مرد م
	SALES ORDER # 100	See BILL T	O (IF DIFFERENT F	ROM LOCATION)	
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		DELIVERY ADDRESS			
Locianson	ATE ZP	CTTY'		STATE ZIP	
PURCHASE OF	DER MUMBER	PHONE NUMBER		CHASE ORDER NUMBER	
PIONE NAME		MANIFEST			
USA EPA ID MA			San HL	7447	
This is to certify that the below named materials are properly classifi	ed, described, packaged, marked a	nd labeled, and are in proper	condition for transportation a	ccording to the applicable regula	tions of the
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40501 OILY WATER DISPOSAL		14 (-pL		9162 55	
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RELATED IN A BREAT OF THE RADIE IN A	1/1		· CL E\	JSTOMER SERVICED /ERY 30 DAYS	
In accordance the N.J.A.C. 7:26-12.1 et seq, LO permits to accept the above described waste		GENERATOR'S SIGNATURE			لي <u>سمب</u>
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Signature	Date		Signature		7 7 Date
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United States Army Fort Monmouth, New Jersey

(2) 유민이는 요구, 문제, 신민이는 전에 가지 않는 것을 가지 않는

Underground Storage Tank Closure and Site Investigation Report

Plonilla jung the Se

Building 9196 Camp Evans Area

NJDEP UST Registration No. 192468-5

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	1.3	Underground Storage Tank Transportation And Disposal	3
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FIGURES

Figure 1	Building 9196 - UST Removal Location Map
Figure 2	Building 9196 - UST Removal and Soil Sample Locations
Figure 3	Building 9196 - UST Remedial Soil Sample Locations

APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of UST Closure
- Appendix C Soil Sample Analytical Data Package
- Appendix D UST Disposal Certificate
- Appendix E Waste Manifest for Off-site Transport of UST Contents

EXECUTIVE SUMMARY

UST Closure

On September 17, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-5 (Fort Monmouth Identification No. 9196), was located west of Building 9196 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the southern end of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). One hole approximately 0.125-inch in diameter was noted in the northeast corner of the UST and both visual observations and instrument readings revealed evidence of contaminated soil surrounding the tank. Samples collected at the time the UST was removed contained total petroleum hydrocarbons (TPHC) concentrations ranging from non-detect to 18,373.32 milligrams per kilogram (mg/kg). After additional soil was excavated and removed, soil remaining in the excavation contained concentrations of TPHC ranging from non-detect to 187.48 mg/kg. The total amount of soil removed from the excavation was approximately 100 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9196 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on the second round of post-excavation soil sampling results, TPHC concentrations in soil do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 192468-5 at Building 9196.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 192468-5, was closed at Building 9196 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on September 17, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 192468-5 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that at least one significant historical discharge was associated with UST No. 192468-5 or associated piping.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9196 is located in the Diana Radar Section of the Camp Evans area of the Fort Monmouth Army Base as shown in Figure 1. UST No. 192468-5 was located west of Building 9196 and associated piping ran approximately 8 feet east from the UST to Building 9196. The UST fill port area was located directly above the southern end of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9196.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Prior to UST decommissioning activities, surficial soil was excavated to expose the UST and associated piping. All free product present in the piping was purged with compressed air into the UST. The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. After the removal of associated piping, soil excavation continued to uncover the UST. Once the UST was uncovered, SMC cut open the tank with a nonsparking pneumatic cutter and removed the remaining contents of the tank with drum vacuum equipment. SMC completed cleaning the UST by wiping the interior out with oil absorbent pads.

After the UST was cleaned, it was removed from the excavation, staged on polyethylene sheeting, and examined for holes. One hole was observed in the northeast corner of the UST by the Tetra Tech site manager and the SMC subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. Soil contamination was observed or detected by the PID/FID located adjacent to the southwestern corner and the east end of the UST. Visual and PID/FID soil screening was also performed along piping associated with the UST. No contamination was noted anywhere along the piping length.

The sludges and tank residues removed from the UST were transported by Lorco Petroleum Company to its NJDEP-approved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix D provides a copy of the bill of lading for the off-site transport of the tank contents.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons, Inc. in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix E provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number
- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figures 2 and 3 and discussed in Section 2.2. Based on PID/FID air monitoring results and total petroleum hydrocarbon (TPHC) results from postexcavation soil samples, soil at the 9196B1, 9196E, and 9196N sampling locations was contaminated. After additional excavation was performed and post-excavation sampling results confirmed that the contaminated soil had been removed, the clean excavated soil and imported clean fill were used to backfill the UST excavation. Contaminated soil was removed to the staging area for disposal off site at a later date.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: David H. Daniels Employer: SMC Environmental Services Group Telephone No.: (610) 265-2700
 NJDEP Certification No.: 0010279
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461
- Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from adjacent to the southwest corner and the eastern end of the UST, as well as the UST excavation sidewalls and bottom, exhibited evidence of contamination; however, soil excavated from the area of the associated piping did not exhibit indications of contamination.

2.2 SOIL SAMPLING

On September 19, 1997, after UST removal, post-excavation soil samples 9196B1, 9196B2, 9196B3 (Duplicate of 9196B2), 9196S, 9196W, 9196E, 9196N, and 9196RF were collected from seven locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 7 to 7.5-feet below ground surface (bgs). The sidewall samples were collected from 6.5 to 7-feet bgs. Sample 9196RF was collected from next to Building 9196 along the former return/feed line piping length of the excavation, which was approximately 8 feet long. Sample 9196RF was collected from 0.5 to 1-feet bgs. Samples 9196OBS was collected from the overburden soil pile to verify that the pile was not contaminated and could be used as clean backfill for the excavation. All samples were analyzed for TPHC and total solids.

Analytical results for the original post-excavation samples revealed 15,028.64 milligrams per kilograms (mg/kg) TPHC at the 9196B1 sample location, 13,158.85 mg/kg TPHC at the 9196E sample location, and 18,373.32 mg/kg TPHC at the 9196N sample location. These concentrations exceed 1,000 mg/kg TPHC, which is NJDEP's criterion for additional soil removal/remediation or for required VOC sampling. As a result, on October 10, 1997, Tetra Tech and SMC excavated additional soil from the bottom of the excavation and the north, south, and west sidewalls. After the additional soil excavation, post-excavation soil samples 9196S21, 9196S22, 9196S23, 9196B21, 9196B22 (Duplicate of 9196B21), 9196B23, 9196W2, 9196E2, 9196N21, 9196N22, 9196N23, AND 9196B24 were collected from a total of eleven sampling locations. The bottom samples were collected from a depth of 9.5 to 10-feet bgs (samples 9196B21 through 9196B23) and 12.5 to 13-feet bgs (sample 9196B24). The sidewall samples were collected from a depth of 8.5 to 9-feet bgs (samples 9196S21 through 9196S23), 9 to 9.5-feet (samples 9196W2 and 9196E2), 10 to 10.5-feet bgs (sample 9196N21), and 12.5 to 13-feet samples 9196N22 and 9196N23). In addition, samples 9196OBS21 and 9196OBS22 were collected from two locations on the

expanded overburden soil pile to verify that the pile was not contaminated and could be used as clean backfill for the excavation. Figure 3 presents the additional post-excavation sampling locations.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's "Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from seven locations on September 19, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figures 2 and 3. The analytical data package is provided in Appendix D.

Three of the post-excavation soil samples collected on September 19, 1997, from the UST excavation contained concentrations of TPHC ranging from 13,158.85 mg/kg to 18,373.32 mg/kg. These results were above the NJDEP soil cleanup criterion of 1,000 mg/kg TPHC, requiring additional soil removal remediation or required volatile organic compound (VOC) sampling. The remainder of the samples contained TPHC concentrations from non-detect to 559.66 mg/kg.

As a result, additional soil excavation and post-excavation sampling was conducted on October 10, 1997 (see Section 2.2). All samples from the eleven sampling locations contained TPHC concentrations ranging from non-detect to 187.48 mg/kg.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 916 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, no longer exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 192468-5 at Building 9196.

Legend of Sample Identifications Camp Evans Area Wall Township, New Jersey

· ·	
В	Sample from the bottom of the excavation
W	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
N	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to
	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed above).
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil").
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST	Above ground storage tank
9105ASTB1	Sample collected at the former location of an AST at the specified building
DEL	Delineation sample to document the extent of contamination
SD	Sample collected from a storm drain
SW	Sample collected from a sidewall of a remedial excavation
CTR	Copper tubing run
CSP-1	Clean soil pile

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Table 1 Summary of Post-Excavation Sampling Activities Building 9196, Camp Evans Area Wall Township, New Jersey

	Date	Date Analysis			Analytical	
Sample ID	Collected	Started	Matrix	Sample Type	Parameters*	Analysis Method
9196OBS	9/17/97	9/18/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196B1	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196S21	10/10/97	- <u>10/14/97</u>	Soil ,	Post-Excavation	TPHC	0QA-QAM-025
9196S22	- 10/10/97 m	e-Eid 10/14/97 (EEE a	tand Soil and	Post-Excavation	- TPHC	00A-0AM-025
9196S23**	10/10/97	10/14/97	Soil	Post-Excavation	TPHC	0QA-QAM-025
9196B21	10/10/97	- 10/14/97	Soll	 Post-Excavation 	· TPHC	OQA-QAM-025
i9196B22**	u., 10/10/97	10/14/97	Soil	 Post-Excavation 	TPHC	OQA-QAM-025
9196B23**		10/14/97	Soil	 Post-Excavation 	TPHC	OQA-QAM-025
9196W2**		10/14/97	Soll	Post-Excavation	TPHC	OQA-QAM-025
9196B2	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196B3	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196W	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196S	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196E	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196E2**	10/10/97		Soil	 Post-Excavation. 	TPHC	OQA-QAM-025
9196N21**	10/10/97	10/14/97	Soil	Post-Excavation	TPHC	0QA-QAM-025
<u>9196N</u>	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196N22**	10/10/97	10//14/97/	Soll	Post-Excavation		OQA-QAM-025
9196N23**	10//10/97	10/14/97	Soil	Post-Excavation	TTPHC	0QA-QAM-025
9196N24**	10/10/97	10/14/97	Soil Soil	Post-Excavation	TPHC	QQA-QAM-025
9196RF	9/19/97	9/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1A	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1B	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1C	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1D	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1E	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196BE1F	10/3/97	10/6/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9196OBS21	10/10/97	10/14/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9096OBS22	10/10/97	10/14/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Note:

* TPHC

Total petroleum hydrocarbons Samples collected to remediate contamination found in sample above. **

Table 2 Post-Excavation Soil Sampling Results Building 9196, Camp Evans Area Wall Township, New Jersey

							NJDEP Soil	
	Sampla		Anolusia	Analytical	Method	Describ	Cleanup	Exceeds
Sample ID	Jaboraton/ID	Sample Date	Analysis Doto(o)	Wethoo	Detection	Result	Criteria [*]	Cleanup
						(mg/kg)	(mg/kg)	
9196OBS	2999.12	9/17/97	9/18 - 19/97	TPHC	195	559.66	10.000	No
9196B1	3004.13	9/19/97	9/22 - 24/97	TPHC	154	15,028.64	10,000	Yes
9196S21**	3061.01	10/10/97	10/14 - 15/97-	TPHC	161	187.48	10,000	No
9196S22**		10/10/97	10/14 - 15/97-	TPHC 👘	160	ND	10,000	No
9196S23**		10/10/97	10/14 - 15/97	TPHC	155	ND ND	10,000	No
9196B214	3061.04	10/10/97: E	10/14 - 15/97	TPHC	173	ND ND	10,000	No
9196B22**	3061.05	10/10/97	10/14 - 15/97	TPHC	- 177	ND 18	10,000	No
9196B23**	3061.06	10/10/97	. 10/14 - 15/97	TPHC	177	. ND	10,000	No.
9196W2**	3061:07	10/10/97	10/14 - 15/97	TPHC	157	ND	10,000	No
9196B2	3004.14	9/19/97	9/22 - 24/97	TPHC	156	221.67	10,000	No
9196B3	3004.15	9/19/97	9/22 - 24/97	TPHC	157	523.64	10,000	No
9196W	3004.16	9/19/97	9/22 - 24/97	TPHC	149	183.81	10,000	No
9196S	3004.17	9/19/97	9/22 - 24/97	TPHC	169	ND	10,000	No
9196E	3004.18	9/19/97	9/22 - 24/97	TPHC	161	13,158.85	10,000	Yes
9196E2**		. 10/10/97	_10/14 - 15/97_		170	ŅD	10,000	No
9196N21	3061.09	10/10/97	10/14 - 15/97	TPHO	163 Julie -	174.01	10,000	No No
9196N	3004.19	9/19/97	9/22 - 24/97	TPHC	156	18,373.32	10,000	Yes
9196N22**		10/40/97	-10/14 - 15/97	· · · · · · · · · · · · · · · · · · ·	- 166 - 1	ND		No No
19196N28		10/10/97	-10/14 - 15/97	SIPHC -	资用资 业 在通过	ND F	ana 10,000 an	e kalan Notrease
9196B24 main	图46061.12200	10/10/9/A	e10/14+15/9/	MULTER	a are 186 georg		2000 10,000 (Siles	
9196RF	3004.20	9/19/97	9/22 - 24/97	TPHC	172	482.61	10,000	NO
9196BE1A	3031.01	10/3/97	10/6 - 8/97	TPHC	163	ND	10,000	NO
9196BE1B	3031.02	10/3/97	10/6 - 8/97	TPHC	154	ND	10,000	NO
9196BE1C	3031.03	10/3/97	10/6 - 8/97	TPHC	1/5		10,000	NO
9196BE1D	3031.04	10/3/97	10/6 - 8/97	TPHC	159		10,000	NO
9196BE1E	3031.05	10/3/97	10/6 - 8/97	TPHC	159	225.48	10,000	NO
9196BE1F	3031.06	10/3/97		TPHC	170	240.34	10,000	NO
91960BS21	3061.13	10/10/97	10/14 - 15/97	TPHU	170		10,000	INO No
91900B222	3061.14	10/10/97	10/14 - 15/97	TPHC	169	ND	10,000	NO

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

TPHC

Total petroleum hydrocarbons Samples collected to remediate contamination found in sample above. **







APPENDIX A

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SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 192468-5

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(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area					
Facility Street Address: Building 1207, DCSOPS-BID					
Municipality: <u>Wall Townshi</u> j	o County : <u>Monmouth</u>				
Block: <u>240, 241 and 242</u> L	ot(s): <u>240 (55,01, 55.02, 55.03 & 55.04)</u> ; <u>241 (1), 242 (1.01 & 1.02</u>				
Telephone Number : (732) 23	9-2427				
B. Owner (RP)'s Name: U	S Army, CECOM				
Street Address: DCSOPS-E	BID, Bldg. 1207 City : Fort Monmouth				
State: <u>NJ</u> Zip: <u>07703</u>	Telephone Number : (732) 532-5052				
C. (Check as appropriate)	D. (Complete all that apply)				
• Site Investigation Report (SIR) \$500 Fee	 Assigned Case Manager : <u>Mr. Ian Curtis</u> UST Registration Number : (7 digits): 20029 - 192458-5 Incident Report Number (10 or 12 digits): 				
Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>				
Report (RIR) \$1000 Fee					
E. Certification by the Subsurface Evaluator:					
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes					
Name: Kevin J. Phelan Signature: <u>Kerrin J. Phelan</u> UST Cert. No.: 0018436					
Firm: Tetra Tech EM, Inc.	Firm's UST Cert. Number: US00457				
Firm Address: <u>1 Bank Stre</u>	et, Suite 103 City: Rockaway				
State: NJ Zip: 07	866 Telephone Number : (973) 9830507, Ext. 230				

State: <u>I</u> (NOTE et seq.)	J.j. Zip: 07866 Telephone Number : (973) 9830507, Ext. 230 Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21
F. Ce The foll 1. 2.	rtification by the Responsible Party(ies) of the Facility: owing 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
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): Mr. Charles Appleby Title: BRAC Environmental Coordinator, Evans Area NJDEP Subsurface Evaluator # 2056 Signature:
	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703 Date: November 30, 2000

APPENDIX B

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PHOTOGRAPHS OF UST CLOSURE UST NO. 192468-5



PHOTO 1: View of the UST-9196 being removed from the ground (looking south/southeast).



PHOTO 2: View of the sampling locations in the UST-9196 excavation (looking east).



PHOTO 3: View of the sampling locations in the UST-9196 remedial excavation (looking south/southwest).



PHOTO 4: View of UST 9196 staged to the south of Building 9062 awaiting removal to Building 9061 (to await permanent disposal) and labeled with all required information.

APPENDIX C

SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 192468-5

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Client :	U.S. Army			Lab. ID # :	2999	
	DPW. SELFM-	PW-EV		Date Rec'd:		18-Sep-97
	Bldg. 173			Analysis Sta	rt:	18-Sep-97
•	Ft. Monmouth,	NJ 07703		Analysis Complete: 19-Se		
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARD	Г		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDGS, 9162
Sample	Field ID Dilution Weight Factor (g)			% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2999.01	9162 OBS	1.00	15.31	91.11	168	ND
2999.02	9162 FPS	1.00	15.72	92.99	161	764.19
2999.03	9162 B1	1.00	15.02	96.79	162	ND
2999.04	9162 B2	1.00	15.11	96.21	162	ND
2999.05	9162 B3	1.00	15.04	96.34	162	ND
2999.06	9162 W	1.00	15.18	77.25	200	ND
2999.07	9162 N	1.00	15.01	95.07	165	ND
2999.08	9162 S	1.00	15.95	94.43	156	ND
2999.09	9162 E	1.00	15.74	89.84	166	ND
2999.10	9162 RF	1.00	15.55	89.23	169	250.24
2999.11	9162 BFP	1.00	15.81	90.16	165	ND
2999.12	8162 OBS	1.00	15.20	79.18	195	559.66
	9196					
METHOD BLANK	18-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

1

Laboratory Director

Client:	U.S. Army			Lab. ID # :		3004	
	DPW. SELFM-I	DPW. SELFM-PW-EV			Date Rec'd:		
	Bldg. 173	Bldg. 173			Analysis Start:		
	Ft. Monmouth,	NJ 07703		Analysis Con	ıplete:	24-Sep-97	
Analysis:	OQA-QAM-025			UST Reg. #:			
Matrix:	Soil	Soil			Closure #:		
Analyst:	D.DEINHARDI	D.DEINHARDT			DICAR #:		
Ext. Meth:	Shake			Location #:	9116, 9196		
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)	
3004.01	9116-RF	1.00	15.62	90.41	166	240.92	
3004.02	9116-OBS(A)	1.00	15.66	96.04	156	243.31	
3004.03	9116-OBS(B)	1.00	15.86	95.64	155	199.57	
3004.04	9116-B1	1.00	15.48	95.59	159	ND	
3004.05	9116-B2	1.00	15.52	91.35	166	ND	
3004.06	9116-B3	1.00	15.45	91.53	166	ND	
3004.07	9116-E	1.00	15.16	96.74	160	ND	
3004.08	9116-S	1.00	15.31	94.51	162	324.09	
3004.09	9116-W	1.00	15.17	94.55	164	ND	
3004.10	9116-N	1.00	15.37	96.12	159	ND	
3004.11	9116-CSP	1.00	15.74	92.75	161	224.20	
3004.12	9116-DS	1.00	15.65	92.10	163	ND	
3004.13	9196-B1	1.00	16.08	94.90	154	15028.64	
3004.14	9196-B2	1.00	15.66	96.37	156	221.67	
3004.15	9196-B3	1.00	15.39	97.08	157	523.64	
3004.16	9196-W	1.00	16.02	98.21	149	183.81	
3004.17	9196-S	1.00	15.49	89.64	169	ND	
3004.18	9196-E	1.00	15.65	93.42	161	13158.85	
3004.19	9196-N	1.00	15.56	96.78	156	18373.32	
3004.20	9196-RF	1.00	15.00	91.09	172	482.61	
METHOD BLANK	22-Sep-97	1.00	15.00	100.00	157	ND	

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3031
	DPW. SELFM-1	DPW. SELFM-PW-EV Bldg. 173				03-Oct-97
	Bldg. 173				Analysis Start:	
	Ft. Monmouth,	Ft. Monmouth, NJ 07703			Analysis Complete:	
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD	D.DEINHARDT			DICAR #:	
Ext. Meth:	Shake Location #:				9196	
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3031.01	9196-BE1A	1.00	15.33	93.82	163	ND
3031.02	9196-BE1B	1.00	15.71	96.83	154	ND
3031.03	9196-BE1C	1.00	15.10	88.77	175	ND
3031.04	9196-BE1D	1.00	16.01	92.42	159	ND
3031.05	9196-BE1E	1.00	15.83	93.20	159	225.48
3031.06	9196-B31F	1.00	14.98	92.16	170	246.34
3031.18	9059-A1	1.00	15.99	93.52	157	ND
3031.14	9059-A2	1.00	15.60	97.65	154	ND
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			ļ	ļ	ļ	<u> </u>
		1.00	15.00	100.00	157	
METHOD BLANK	6-Oct-97	1.00	15.00	100.00	107	

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

Client:	U.S. Army DPW. SELFM-PW-EV			Lab. ID # : Date Rec'd:		3061	
						10-Oct-97	
	Bldg. 173	Bldg. 173			Analysis Start:		
	Ft. Monmouth,	Ft. Monmouth, NJ 07703			Analysis Complete:		
Analysis:	OQA-QAM-025			UST Reg. #:			
Matrix:	Soil	Soil			Closure #:		
Analyst:	D.DEINHARDI	D.DEINHARDT			DICAR #:		
Ext. Meth:	Shake Location #:			BLDG. 9196			
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)	
3061.01	9196-S21	1.00	15.72	93.14	161	187.48	
3061.02	9196-S22	1.00	15.00	97.67	160	ND	
3061.03	9196-S23	1.00	15.48	98.23	155	ND	
3061.04	9196-B21	1.00	15.36	88.41	173	ND	
3061.05	9196-B22	1.00	15.00	88.32	177	ND	
3061.06	9196-B23	1.00	15.13	87.88	177	ND	
3061.07	9196-W2	1.00	15.36	97.42	157	ND	
3061.08	9196-E2	1.00	15.45	89.37	170	ND	
3061.09	9196-N21	1.00	15.76	91.57	163	174.01	
3061.10	9196-N22	1.00	15.44	91.48	166	ND	
3061.11	9196-N23	1.00	15.68	86.15	174	ND	
3061.12	9196-B24	1.00	15.10	83.66	186	ND	
3061.18	9196-OBS21	1.00	15.17	91.10	170	ND	
3061.14	9196-OBS22	1.00	15.21	91.46	169	ND	
· · · · · · · · · · · · · · · · · · ·							
METHOD BLANK	14-Oct-97	1.00	15.00	100.00	157	ND	

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director


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

Data File Name	v02179.d	Sample Name	3031.09
Operator	Skelton	Field ID	Trip Blank 9196-TB
Date Acquired	10/10/19 -1:1:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile	_		not detected	6.25_Ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	_{2.50} ug/L	na
108203	Di-isopropyl ether			not detected	_{1.25} ug/L	na
	Dichlorodifluoromethane			not detected	_{3.63} ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	_{1.45} ug/L	10
75-00-3	Chloroethane			not detected	_{2.20} ug/L	na
75-69-4	Trichlorofluoromethane			not detected	_{1.31} _ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	_{1.57} ug/L	700
75-15-0	Carbon Disulfide			not detected	_{0.54} ug/L	na
75-09-2	Methylene Chloride	i .		not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	_{0.50} ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	_{2.06} ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1.1.1-Trichloroethane			not detected	_{0.81} ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene		··· · · · · ·	not detected	_{0.51} ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	_{0.78} ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05_ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/Ł	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	па
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	. 2
541-73-1	1,3-Dichlorobenzene			not detected	_{2.51} ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	. 74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	- 600

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

Data File Name	v02180.d	Sample Name	3031.10
Operator	Skelton	Field ID	9196-FB
Date Acquired	10/10/19 -1:2:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	_{6.25} ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	_{2.50} ug/L	na
108203	Di-isopropyl ether			not detected	_{1.25} ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	_{0.79} ug/L	30
75-01-4	Vinyl Chloride			not detected	_{2.61} ug/L	5
74-83-9	Bromomethane			not detected	_{1.45} ug/L	10
75-00-3	Chloroethane			not detected	_{2.20} ug/L	па
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	_{0.74} ug/L	2
67-64-1	Acetone			not detected	_{1.57} ug/L	700
75-15-0	Carbon Disulfide			not detected	_{0.54} ug/L	па
75-09-2	Methylene Chloride			not detected	_{1.66} ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	_{0.50} ug/L	100
75-35-3	1,1-Dichloroethane			not detected	_{0.83} ug/L	70
108-05-4	Vinyl Acetate			not detected	_{2.07} ug/L	na
78-93-3	2-Butanone			not detected	_{2.06} ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	_{0.43} ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	_{0.81} ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene	ļ		not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene	1		not detected	0.92 ug/L	1
591-78-6	2-Hexanone	ļ		not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	_{2.53} ug/L	па
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	_{3.08} ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

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

Data File Name	V02181.D	Sample Name	3031.11
Operator	Skelton	Field ID	9196-VOC
Date Acquired	10/10/19 -1:2:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	па
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L	na
108203	Di-isopropyl ether		· · · · ·	not detected	_{1.25} ug/L	па
	Dichlorodifluoromethane			not detected	_{3.63} ug/L	na
74-87-3	Chloromethane			not detected	<u>0.79</u> ug/L	30
75-01-4	Vinyl Chloride			not detected	_{2.61} ug/L	5
74-83-9	Bromomethane			not detected	_{1.45} ug/L	10
75-00-3	Chloroethane			not detected	_{2.20} ug/L	na
75-69-4	Trichlorofluoromethane			not detected	_{1.31} ug/L	na
75-35-4	1,1-Dichloroethene			not detected	_{0.74} ug/L	2
67-64-1	Acetone	11.09	20193	14.26 ug/L	_{1.57} ug/L	700
75-15-0	Carbon Disulfide			not detected	_{0,54} ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	_{0.50} ug/L	100
75-35-3	1.1-Dichloroethane			not detected	_{0.83} ug/L	70
108-05-4	Vinvl Acetate			not detected	_{2.07} ug/L	na
78-93-3	2-Butanone			not detected	_{2.06} ug/L	300
	cis-1,2-Dichloroethene			not detected	_{0.65} ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	_{0.51} ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	_{0.78} ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	па
10061-01-5	cis-1,3-Dichloropropene			not detected	_{0.60} ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 Ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	. 4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	. 74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

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			1A					FIELD II	Ο.	
	١	VOLATILE	ORGANICS /	ANALY	SIS DAT/	A SHEE	T	Trin	Blank	
Lab Name:	FMETL			1	NJDEP #	13461				
Project:	971251	Ca	se No.: 303	1	Locatio	n: 9190	s se	DG No.:		
Matrix: (soil/	water)	SOIL			La	ab Samp	le ID:	3031.07		
	-1.	40.0	- (almi) G		1.0	, b Eila 10	.	V02168 F)	
Sample wive	01:	10.0	(g/m) <u>G</u>		LC -		J.	V02100.L		
Level: (low/r	med)	MED	_		Da	ate Rec	eived:	10/03/97		
% Moisture:	not dec.	0			Da	ate Anal	yzed:	10/07/97		
GC Column	Rtx50	2.2 ID: 0.			Di	ilution F	actor:	1.0		
	<u></u>	<u></u>	(ut)		6	oil Aligu	of Volu			(nl.)
Soil Extract	volume:	2000	(uc)		30	on Anqu		ne. <u>50</u>		(uc)
				CON			NITS			
0 4 0 M	-	COME		(ug/l					0	
CAS N	5.	COMP	UND	(uy/L	or ug/ng)) <u>c</u>	GING		Q	
10702	28	Acro	lein					1800	U	
10702	31		onitrile					1800	U	
7565())	tert-E	Butyl alcohol					3200	U	
16340	, 144	Meth	vl-tert-Butvl	ether				750	U	
10840	13	Di-is	opropyl ether	r				500	U	
10020		Dich	lorodifluorom	ethane				1000	U	
74.87	-3	Chlo	romethane					250	U	_
74-07	-1	Vinv	Chloride					750	U	
74.92	<u></u>	Bron	omethane					500	U	
74-00	13	Chlo	roethane					750	Ū	
75-00	<u>-</u>	Trich	lorofluorome	thane				500	Ū	
75-35	5_1	1 1-1	Dichloroether	1e				250	U	
67.6/	<u>)-+</u>		one					500	U	
75.14	5.0	Cart	on Disulfide					250	U	
75-10	<u>)-0</u>	Meth	wlene Chlori	de				500	Ū	
156 6	30-5	tran	-1 2-Dichlor	oethene				500	U	
75.35	5 3	11_	<u>Dichloroethau</u>	ne				250	Ū	
109.0)5_4	Vinv	L Acetate					750	Ŭ	
79.03	2.3	2-Bi	itanone					750	Ū	
10-30	<u> </u>		2-Dichloroe	thene				250	Ū	
67.64	3.3	Chlo	roform					250	U	
75-5	<u>5-6</u>	11	1-Trichloroet	hane				250	U	
<u>75-50</u>	3_5	Carl	on Tetrachle	oride				500	U	
71 /	3.2	Ben	zene	51140				250	U	
107.0	0 <u>~2</u> 06_2	12-	Dichloroetha	ne				500	ี ป	
70.0	16		ploroethene					250	U	
79-0	7.5	12	Dichloroprop	ane				250	U U	
75.0	7 /	Bron	modichlorom	ethane				250	Ū	
110	75.0	2-01	nloroethyl vir	vi ethe	 r			500	Ū	
100	10-0		1.3. Dichloror	ronene	1 1			250	U U	
1000	10.1		othyl_2_Pent:	anone	<u> </u>			500		
108-	10-1		iene			<u>.</u>		250	T U	
100-	1-02-8	tron	s-1.3-Dichlor	roprope	ne	<u> </u>		500	T Ū	
	0.5	<u> </u>	2-Trichloroet	hane			<u> </u>	500	- u	{
19-0	19.1		achloroether	1e				250	T U	
<u> </u>	78.6	<u></u>	evanone				1	500	T Ū	
091-	18-1		romochlorom	ethane			1	500	1	
100	-+0-1 00_7	OD	ornbenzene			<u> </u>	1	250	- ŭ	
100-	<u>/1_/</u>		vibenzene					500	1	
100-	·++ =++	jui	Incirectio				!			

			IA		FIELD ID).	
	١	OLATILE ORGANIC	S ANALYSIS DATA S	HEET	Tulu		
Lab Name:	FMETL		NJDEP # _13	3461	i ripi	Blank	
Project:	971251	Case No.: 3	031 Location:	9196 S	DG No.:		
Matrix: (soil/	water)	SOIL	Lab S	ample ID:	3031.07		
Sample wt/v	ol:	10.0 (g/ml)	G Lab F	ile ID:	V02168.D		
Level: (low/i	ned)	MED	Date	Received:	10/03/97		
% Moisture:	not dec.	0	Date	Analyzed:	10/07/97		
GC Column:	Rtx502	2.2 ID: 0.25 (mn	n) Dilutic	on Factor:	1.0		
Soil Extract	Volume:	25000 (uL)	Soil A	liquot Volu	me: <u>50</u>		(uL)
			CONCENTRATIO	N UNITS:			
CAS N	D.	COMPOUND	(ug/L or ug/Kg)	UG/KG	····	Q	
1330-	20-7	m+p-Xylenes			750	U	
1330-	20-7	o-Xylene			500	U	
100-4	2-5	Styrene			500	<u> </u>	
75-25	-2	Bromoform			500	U	
79-34	-5	1,1,2,2-Tetrach	loroethane		500	<u> </u>	
541-7	3-1	1,3-Dichlorobe	nzene		750	<u> </u>	
106-4	6-7	1.4-Dichlorobe	nzene		750	<u> </u>	
95-50	-1	1,2-Dichlorobe	nzene		750	<u> </u>	

	1A			FIELD ID	.
	VOLATILE ORGANICS ANA				
Lab Name: FMEIL		$_{}$ NJDEP # 1346	<u> </u>	L	
Project: 971251	Case No.: 3031	Location: 91	96 SD	G No.:	
Matrix: (soil/water)	SOIL	Lab Sarr	ple ID: 3	8031.08	
Sample wt/vol	11.2 (a/ml) G	Lab File	ID: \	/02169.D	
	MED (9.0.07 -	Dete Be		0/02/07	<u>-</u>
Level: (low/med)	MED	Date Re		0/03/97	<u> </u>
% Moisture: not dec.	0	Date Ana	alyzed: 1	0/07/97	
GC Column: Rtx50)2.2 ID: 0.25 (mm)	Dilution	Factor: 1	1.0	
Soil Extract Volume	25000 (ul.)	Soil Alia	– uot Volum	ne: 50	 (uL
	20000 (12)				(****
	C	ONCENTRATION	UNITS:		
	COMPOLIND (u	a/L or ua/Ka)	UG/KG		Q
CAO NO.		9/2 0/ 0 9/1 9/			-
107028	Acrolein			1600	U
107131	Acrylonitrile			1600	U
75650	tert-Butyl alcohol			2900	U
1634044	Methyl-tert-Butyl ether	<u>r</u>		670	U
108203	Di-isopropyl ether	<u>.</u>		450	<u> </u>
	Dichlorodifluorometha	ine	·	890	<u> </u>
74-87-3	Chloromethane			220	<u> </u>
75-01-4	Vinyl Chloride			670	<u> </u>
74-83-9	Bromomethane			450	
75-00-3	Chloroethane			670	<u>U</u>
75-69-4	Trichlorofluoromethan	1e		450	
75-35-4	1,1-Dichloroethene		1	<u>ZZU</u>	
67-64-1	Acetone		····	220	
75-15-0	Carbon Disulide			450	<u> </u>
75-09-2 456.60 F	trans_1 2-Dichloroeth	ono		450	<u> </u>
75 25 2	1 1-Dichloroethane			220	<u>U</u>
109.05.4				670	<u> </u>
79 02 2	2-Butanone			670	U
10-93-5	cis-1 2-Dichloroethen	e		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	U
75-27-4	Bromodichlorometha	ne		220	U
110-75-8	2-Chloroethyl vinyl et	her		450	U
10061-01-5	cis-1,3-Dichloroprope	ene		220	
108-10-1	4-Methyl-2-Pentanon	e		450	
108-88-3	Toluene			220	
10061-02-6	trans-1,3-Dichloropro	pene		450	
79-00-5	1,1,2-Trichloroethane	<u>}</u>		450	
127-18-4	Tetrachloroethene			220	
591-78-6	2-Hexanone			450	
126-48-1		пе		220	
108-90-7				<u>450</u>	
100-41 - 4	Euryidenzene			-+50	U

		1A			FIELD ID	•	
	VC	DLATILE ORGANICS /	NALYSIS DATA SHE	ET	BEI	100	
Lab Name:	FMETL		NJDEP # 13461				
Project:	971251	Case No.: 3031	Location: 919	96 SI	DG No.:		
Matrix: (soil/v	vater) S	SOIL	Lab Sam	nple ID:	3031.08		
Sample wt/vo	ol: _1	1.2 (g/ml) <u>G</u>	Lab File	ID:	V02169.D		
Level: (low/n	ned) 👖	MED	Date Re	ceived:	10/03/97		
% Moisture:	not dec. 🤇)	Date Ana	alyzed:	10/07/97		
GC Column:	Rtx502.	2 ID: <u>0.25</u> (mm)	Dilution	Factor:	1.0		
Soil Extract \	/olume: 2	5000 (uL)	Soil Aliq	uot Volu	me: <u>50</u>		(uL)
	_		CONCENTRATION			~	
CAS NO	Э.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-2	20-7	m+p-Xylenes			670	U	
1330-2	20-7	o-Xylene			450	U	
100-42	2-5	Styrene		ļ	450	U	
75-25	2	Bromoform		1	450	U	
79-34	-5	1,1,2,2-Tetrachlor	oethane		450	U	
541-73	3-1	1,3-Dichlorobenze	ne	<u> </u>	670	<u> </u>	
106-4	6 <u>-7</u>	1,4-Dichlorobenze	ene		670	U	
95-50	-1	1,2-Dichlorobenze	ne		670	U]

	1E VOLATILE ORGANICS AN	IALYSIS DATA SHE	ET FIELD I	D
	TENTATIVELY IDENTI	FIED COMPOUNDS	Dail	v Blank
Lab Name: FME	TL	Project 9712	251	y Dialik
NJDEP # <u>1346</u>	1 Case No.: 3031	Location 91	96 SDG No.:	
Matrix: (soil/water)	WATER	Lab San	ple ID: Daily Bla	nk
Sample wt/vol:	5.0 (g/ml) <u>ML</u>	Lab File	ID: <u>V02178.</u>	D
Level: (low/med)	LOW	Date Re	ceived: 10/03/97	
% Moisture: not de	C	Date An	alyzed: <u>10/10/97</u>	
GC Column: RT	X-502 ID: 0.25 (mm)	Dilution	Factor: <u>1.0</u>	
Soil Extract Volume	e: (uL)	Soil Aliq	uot Volume:	(uL)
Number TICs found	d:	(ug/L or ug/Kg)		
CAS NO.	COMPOUND	RT	EST. CONC	;. Q

				1E						
	١	/OLATI	LE ORGAN	ICS AN	VALYSIS DAT	ΓA S	SHEET		FIELD ID.	
		TEN	FATIVELY I	DENTI	FIED COMPO	JUN	1DS		D. H. DI.	
Lab Name:	FMETL				NJDEP #	ŧ _1	13461			ank
Project:	971251		Case No.:	3031	Locati	on:	9196	_ SI	DG No.:	
Matrix: (soil/w	vater)	SOIL			L	ab i	Sample I	ID:	Daily Blank	
Sample wt/vo	ol:	10.0	(g/ml)	G	L	ab	File ID:		V02161.D	
Level: (low/m	ned)	MED			D)ate	Receive	ed:	10/03/97	
% Moisture: r	not dec.	0			C)ate	Analyze	ed:	10/07/97	
GC Column:	Rtx50	2.2 ID:	<u>0.25</u> (m	nm)	C	Dilut	ion Fact	or:	1.0	
Soil Extract V	/olume:	25000	(uL)		S	Soil	Aliquot \	/olu	me: <u>50</u>	(uL)
						ATI a)		rs:		
Number TICs	s found:	C)			9)				
CAS NO.		сом	POUND				RT	ES	ST. CONC.	Q

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	· · ·	TENTATI			אוור אוור				
Lab Name:	FMETL			Project	2	971251		9196TE	3
NJDEP #	13461	Cas	e No.: <u>3031</u>	Locati	on	9196	S)G No.:	
Matrix: (soil/w	vater)	WATER		L	ab (Sample I	ID:	3031.09	<u></u>
Sample wt/vc	ol:	5.0	(g/ml) ML	L	ab i	File ID:		V02179.D	<u> </u>
Level: (low/n	ned)	LOW		C)ate	Receive	ed:	10/03/97	
% Moisture: r	not dec.			C)ate	e Analyze	ed:	10/10/97	
GC Column:	RTX-5	02 ID: 0.2	25 (mm)	C	oilut	ion Fact	or:	1.0	
Soil Extract V	/olume:		_ (uL)	S	Soil	Aliquot V	/olui	ne:	(uL)
					ATI(ON UNIT	TS:		
Number TICs	s found:	0			9/		L		;
CAS NO.		COMPOL	IND			RT	ES	T. CONC.	Q

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		1E					
	VOLATILE C	RGANICS AN	ALYSIS DAT	A SHEET		FIELD ID	
	TENTATI	VELY IDENTIF	TED COMPO	UNDS		9196FI	в
Lab Name: FM	ETL		Project	971251			
NJDEP # <u>134</u>	161 Cas	e No.: 3031	Locatio	n <u>9196</u>	SD	G No.:	
Matrix: (soil/wate	r) <u>WATER</u>		La	b Sample	ID: 3	031.10	
Sample wt/vol:	5.0	(g/ml) ML	La	b File ID:		/02180.D	
Level: (low/med)	LOW		Da	ate Receiv	'ed: 1	0/03/97	
% Moisture: not o	lec		Da	ate Analyz	ed: 1	0/10/97	
GC Column: R	TX-502 ID: 0.2	25 (mm)	Di	lution Fac	tor: 1	.0	
Soil Extract Volur	ne:	_ (uL)	Sc	il Aliquot	Volum	ie:	(uL)
		(CONCENTRA		TS:		
Number TICs fou	ind: 0	(ug/L or ug/Kg) <u>UG</u>	/L	<u> </u>	
CAS NO.	COMPOL	IND		RT	EST	, CONC.	Q

			1E					
	١	OLATILE ORG	ANICS ANA	LYSIS DATA	SHEET		FIELD ID	
		TENTATIVEL	Y IDENTIFII	ED COMPOU	INDS	ſ	9196\/C	
Lab Name:	FMETL			Project	971251	[919040	
NJDEP #	13461	Case No	o.: <u>3031</u>	Location	9196		3 No.:	
Matrix: (soil/w	vater)	WATER		Lab	Sample	ID: <u>3</u>	031.11	
Sample wt/vo	d:	<u>5.0</u> (g/r	nl) <u>ML</u>	Lat	File ID:	V	02181.D	
Level: (low/m	ned)	LOW		Dat	te Receiv	ed: 10	0/03/97	
% Moisture: r	not dec.			Dat	te Analyz	ed: <u>1</u>	0/10/97	
GC Column:	RTX-5	02 ID: 0.25	(mm)	Dilu	ution Fact	or: <u>1</u>	.0	
Soil Extract V	olume:	(ul	L)	Soi	il Aliquot \	/olum	e:	(uL)
			CC			TS:		
Number TICs	found:	0	(U)	yrt or ugrKg)	<u>UG/</u>	L		
CAS NO.		COMPOUND			RT	EST	. CONC.	Q

	١	VOLATI	1E LE ORGANICS	ANALYSIS DA'	TA SHEET		FIELD ID.	
	TENTATIVELY I				DUNDS		TrinBla	nk
Lab Name:	FMETL			NJDEP a	# 13461		прыа	
Project:	971251		Case No.: 303	1Locati	on: <u>9196</u>	S	DG No.:	
Matrix: (soil/w	vater)	SOIL		L	ab Sample	ID:	3031.07	
Sample wt/vc	ol:	10.0	(g/ml) <u>G</u>		ab File ID:		V02168.D	
Level: (low/n	ned)	MED		E	Date Receiv	ved:	10/03/97	
% Moisture: r	not dec.	0		۵	Date Analyz	zed:	10/07/97	
GC Column:	Rtx502	2.2 ID:	<u>0.25</u> (mm)	Ľ	ilution Fac	tor:	1.0	
Soil Extract V	/olume:	25000	(uL)	S	Soil Aliquot	Volui	me: <u>50</u>	(uL)
				CONCENTR	ATION UN	ITS:		
Number TICs	s found:	0		(ug/L or ug/K	g) <u>UG</u>	/KG		
CAS NO.		сом	POUND		RT	ES	T. CONC.	Q

			1E					
	١	JOLATI	LE ORGANICS /	ANALYSIS DA	TA SHEET		FIELD ID.	
		TEN	FATIVELY IDEN	TIFIED COMPO	DUNDS			
Lab Name:	FMETL			NJDEP ;	# 13461		BEVO	С
Project:	<u>971251</u>	. <u> </u>	Case No.: 303	Locati	on: <u>9196</u>	_ SE)G No.:	
Matrix: (soil/v	water)	SOIL		L	ab Sample.	ID:	3031.08	
Sample wt/vo	ol:	11.2	(g/ml) <u>G</u>	L	ab File ID:		V02169.D	
Level: (low/r	ned)	MED		Ľ	Date Receiv	/ed:	10/03/97	
% Moisture:	not dec.	0		E	Date Analyz	ed:	10/07/97	
GC Column:	<u>Rtx50</u>	2.2 ID:	<u>0.25</u> (mm)	[Dilution Fac	tor:	1.0	
Soil Extract V	Volume:	25000	(uL)	ç	Soil Aliquot	Volur	ne: <u>50</u>	(uL)
				CONCENTR	ATION UN	ITS:		
Number TIC:	s found:	0) 	(ug/L or ug/K	g) <u>UG</u>	/KG		
CAS NO.		сом	POUND		RT	ES	T. CONC.	Q

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

Data File Name	bn0593.d	Sample Name	3031.10
Operator	Skelton	Field ID	9196-FB
Date Acquired	10/16/97 19:56	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
541-73-1	1,3-Dichlorobenzene	[not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	_
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene	<u> </u>		not detected	0.26 ug/L	400
132-64-9	Dibenzofuran	<u> </u>		not detected	0.32 ug/L	
121-14-2	2,4-Dinitrotoluene	L		not detected	0.36 ug/L	10
84-66-2	Diethylphthalate	16.43	355321	2.67 ug/L	0.82 ug/L	5000
86-73-7	Fluorene	ļ		not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether	<u> </u>		not detected	0.31 ug/L	
100-01-6	4-Nitroaniline	<u> </u>		not detected	0.90 ug/L	
86-30-6	n-Nitrosodiphenylamine	<u> </u>		not detected	0.23 ug/L	20
103-33-3	Azobenzene	l		not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether	<u> </u>		not detected	0.55 ug/L	ļ
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
85-01-8	Phenanthrene	<u> </u>	·	not detected	0.18 ug/L	
120-12-7	Anthracene	<u> </u>		not detected	0.19 ug/L	ļ
84-74-2	Di-n-butylphthalate	20.30	499873	2.36 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene	<u> </u>	<u> </u>	not detected	0.41 ug/L	300
92-87-5	Benzidine	<u> </u>		not detected	1.45 ug/L	50
129-00-0	Pyrene	ļ		not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate	<u> </u>	ļ	not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene	<u> </u>		not detected	0.22 ug/L	10

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91-94-1	3.3'-Dichlorobenzidine	not detected	0.46 ug/L	60
218-01-9	Chrysene	not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate	not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene	not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene	not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene	not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene	not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene	not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene	not detected	0.40 ug/L	

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Data File Name	BN0594.D	Sample Name	3031.12
Operator	Skelton	Field ID	9196-BN
Date Acquired	10/16/97 20:40	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane		·	not detected	0.46 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate	<u> </u>		not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	· · ·
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
132-64-9	Dibenzofuran			not detected	0.32 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate	16.43	355321	2.67 ug/L	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether	<u> </u>		not detected	0.31 ug/L	
100-01-6	4-Nitroaniline	ļ		not detected	0.90 ug/L	
86-30-6	n-Nitrosodiphenylamine	<u> </u>		not detected	0.23 ug/L	20
103-33-3	Azobenzene	ļ		not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene	<u> </u>		not detected	0.82 ug/L	10
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene	<u> </u>		not detected	0.19 ug/L	
84-74-2	Di-n-butylphthalate	20.30	499873	2.36 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene	ļ		not_detected	0.41 ug/L	300
92-87-5	Benzidine	<u> </u>		not detected	1.45 ug/L	50
129-00-0	Pyrene	<u> </u>		not_detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate	<u> </u>		not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene	<u> </u>		not detected	0.22 ug/L	10

91-94-1	3,3'-Dichlorobenzidine	not detected	0.46 ug/L	60
218-01-9	Chrysene	not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	not detected	0.51 ug/L	30
117-84-0	Di-n-octylphthalate	not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene	not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene	not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene	not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene	not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene	not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene	not detected	0.40 ug/L	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID

		TENTA	FIVELY IDENTIF	FIED	COMPOUNDS			
Lab Name:	FMETL			L	ab Code 1346	1	SBLK	
Project	971251	Ca	ase No.: <u>3031</u>		Location 919	96 S	DG No.:	
Matrix: (soil/w	vater)	WATER			Lab Sam	ple ID:	Extraction Blan	
Sample wt/vc	ol:	1000	(g/ml) ML		Lab File	ID:	BN0601.D	
Level: (low/n	ned)	LOW	_		Date Rec	ceived:	10/03/97	
% Moisture:		dec	anted: (Y/N)	N	Date Ana	alyzed:	10/17/97	
Concentrated	Extract	Volume:	1000 (uL)		Dilution F	actor:	1.0	
Injection Volu	ıme: <u>1.0</u>) (uL)			Soil Aliqu	iot Volu	me: <u>1</u>	(uL)
GPC Cleanu	p: (Y/N)	Ν	рН: 7					

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensate	5.08	52	J
2.	unknown	26.99	30	J

.

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID **TENTATIVELY IDENTIFIED COMPOUNDS** 9196-FB Lab Name: FMETL Lab Code 13461 Project 971251 Case No.: 3031 Location 9196 SDG No.: Matrix: (soil/water) WATER Lab Sample ID: 3031.10 Sample wt/vol: 1000 Lab File ID: (g/ml) ML BN0593.D Date Received: 10/03/97 Level: (low/med) LOW % Moisture: decanted: (Y/N) Ν Date Analyzed: 10/16/97 Concentrated Extract Volume: 1000 (uL) Dilution Factor: 1.0 Injection Volume: 1.0 (uL) Soil Aliquot Volume: 1 (uL)GPC Cleanup: (Y/N) Ν pH: 7

CONCENTRATION UNITS:

 Number TICs found:
 2
 (ug/L or ug/Kg)
 UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000111-46-6	Ethanol, 2,2'-oxybis-	7.61	38	JN
2	unknown	26.99	33	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

		TENTAT	IVELY IDEN	ITIFIE		NDS	0400 5	.
Lab Name:	FMETL				Lab Code	13461	9196-8	N
Project	971251	Ca	se No.: <u>303</u>	31	Location	<u>9196</u> S	DG No.:	
Matrix: (soil/	water)	WATER	_		Lab	Sample ID:	3031.12	_
Sample wt/vol:		500	(g/ml) <u>M</u> l	L	Lab	File ID:	BN0594.D	
Level: (low/r	med)	LOW	_		Date	e Received:	10/03/97	
% Moisture:		dec	anted: (Y/N) _ N	l Date	e Analyzed:	10/16/97	
Concentrate	d Extract	Volume:	500 (uL	.)	Diluf	tion Factor:	1.0	
Injection Vol	ume: <u>1.</u>	0 (uL)			Soil	Aliquot Volu	ime: <u>1</u>	(uL)
GPC Cleanu	ıp: (Y/N)	Ν	pH: 7					

CONCENTRATION UNITS:

Number TICs found:	5	(ug/L or ug/Kg)	UG/L	·····
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	Aldol condensate	5.05	23	J
2 000111-46-6	Ethanol, 2,2'-oxybis-	7.65	66	JN
3. 000084-74-2	Dibutyl phthalate	19.38	16	JN
4	unknown hydrocarbon	23,83	26	J
5.	unknown	27.00	76	J

.

APPENDIX D

UST DISPOSAL CERTIFICATE UST NO. 192468-5 Anoter Front The Drawley Court PC for 1964 - Harlon, CT 66164.3046 Call Bd Play: 1-006-021-0030

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SMC Environmental Services Group A tial values of Science Management Corporation

P.O. Box 859 Valley Forget Permsylvania 19482 Telephone (610) 265-2700

CERTIFICATE OF NON-HAZARDOUS VESSEL

FACILITY: VESSEL

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

Signature

Site Manager 2/4

Print or Type Name Here

APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 192468-5

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United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 9307 **Camp Evans Area**

NJDEP UST Registration No. 90029-32

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Table 1	Summary of Post-Excavation Sampling Activities
Table 2	Post-Excavation Soil Sampling Results

FIGURES

Figure 1	Building 9307 - UST Removal Location Map
Figure 2	Building 9307 - UST Removal and Soil Sample Locations

Figure 3 Building 9307 - UST Remedial Soil Sample Locations

APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of UST Closure
- Appendix C Soil Sample Analytical Data Package
- Appendix D UST Disposal Certificate
- Appendix E Waste Manifest for Off-site Transport of UST Contents

EXECUTIVE SUMMARY

UST Closure

On September 10, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-32 (Fort Monmouth Identification No. 9307), was located northwest of Building 9307 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the southern end of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). One hole approximately 0.25-inch in diameter was noted on the north side of the UST; however, no evidence of potentially contaminated soil was observed around the tank. Samples collected at the time the UST was removed contained total petroleum hydrocarbons (TPHC) at up to 1,104.66 milligrams per kilogram (mg/kg). After additional soil was excavated and removed, TPHC concentrations in the remaining soil range from nondetect to 476.74 mg/kg. The total amount of soil removed from the excavation was 25 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9307 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in remaining soil do not exceed the NJDEP soil cleanup criterion for total organic contaminant of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 90029-32 at Building 9307.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-32, was closed at Building 9307 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on September 10, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 90029-32 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that no significant historical discharges are associated with UST No. 90029-32 or associated piping.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9307 is located in the Camp Evans area of the Fort Monmouth Army Base as shown in Figure 1. UST No. 90029-32 was located northwest of Building 9307 and associated piping ran approximately 6 feet southeast from the UST to Building 9307. The UST fill port area was located directly above the southern end of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9307.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Prior to UST decommissioning activities, surficial soil was excavated to expose the UST and associated piping. All free product present in the piping was drained into the UST. The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. After the removal of associated piping, soil excavation continued to uncover the UST. Because of a malfunction with the drum vacuum equipment, the removal contractor, SMC Environmental Services Group (SMC), removed the tank from the ground prior to opening and cleaning the tank.

After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. One hole approximately 0.25-inch in diameter was observed by the Tetra Tech site manager and the SMC subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. No evidence of contamination was observed or detected by the PID/FID. Visual and PID/FID soil screening was also performed along piping associated with the UST. No contamination was noted anywhere along the piping length.

After removal of the UST, polyethylene sheeting was placed in the excavation and the excavation was backfilled because of the potential for heavy precipitation overnight and subsequent undermining of the building foundation.

The following day, the UST was cut open with a nonsparking pneumatic cutter and the remaining contents of the tank (approximately 55 gallons) were removed with a drum vacuum device. SMC completed cleaning the UST by wiping the interior of the tank with oil absorbent pads.

The 55 gallons removed from the UST were transported by Lorco Petroleum Company to its NJDEPapproved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix E provides a copy of the waste manifest for the off-site transport of the 55 gallons of sludge.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons, Inc. in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix D provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number
- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figures 2 and 3 and discussed in Section 2.2. Based on PID/FID air monitoring results and total petroleum hydrocarbon (TPHC) results from post-excavation soil samples, soil at the UST9307B3 sampling location was contaminated. After additional excavation was performed and post-excavation sampling results confirmed that the contaminated soil had been removed, the clean excavated soil and imported clean fill were used to backfill the UST excavation. Contaminated soil was removed to the staging area for disposal off site at a later date.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

- Subsurface Evaluator: David H. Daniels Employer: SMC Environmental Services Group Telephone No.: (215) 788-7844
 NJDEP Certification No.: 0010279
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461
- Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900
 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from around the UST and associated piping, as well as the UST excavation sidewalls and bottom, did not exhibit evidence of contamination at the time of the UST removal.

2.2 SOIL SAMPLING

On September 10, 1997, after UST removal, post-excavation soil samples UST9307B1, UST9307B2 (Duplicate of UST9307B1), UST9307B3, UST9307W, UST9307E, UST9307N, UST9307S, and UST9307RF were collected from seven locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 7 to 7.5-feet below ground surface (bgs). The sidewall samples were collected from 6.5 to 7-feet bgs. Sample UST9307RF was collected from next to Building 9307 along the former return/feed line piping length of the excavation, which was approximately 6 feet long. Sample UST9307RF was collected from 3 to 3.5-feet bgs. All samples were analyzed for TPHC and total solids.

Analytical results for the original post-excavation samples revealed 1,104.66 milligrams per kilogram (mg/kg) TPHC at the UST9307B3 sample location. This concentration exceeds 1,000 mg/kg TPHC, which is NJDEP's criterion for additional soil removal/remediation or for required VOC sampling. As a result, on October 14, 1997, Tetra Tech and SMC excavated additional soil from the western half of the

original UST excavation and collected post-excavation soil samples 9307B4, 9307B5 (duplicate of 9307B4), 9307B6, 9307N21, 9307W21, and 9307S21 from a total of five sampling locations. Bottom samples were collected from 10 to 10.5 feet bgs. Sidewall samples were collected from 9.5 to 10 feet bgs. In addition, samples 9307OBS1, 9307OBS2, and 9307OBS3 were collected from three locations on the overburden soil pile to verify that the pile was not contaminated and could be used as clean backfill for the excavation. Figure 3 presents the additional post-excavation sampling locations.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from seven locations on September 10, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figures 2 and 3. The analytical data package is provided in Appendix C.

One of the post-excavation soil samples collected on September 10, 1997, from the UST excavation and from below piping associated with the UST contained 1,104.66 mg/kg of TPHC, which exceeded the NJDEP soil cleanup criterion of 1,000 mg/kg TPHC, requiring additional soil removal remediation or required VOC sampling. The remainder of the samples contained TPHC concentrations from nondetect to 476.74 mg/kg.

As a result, additional soil excavation and post-excavation sampling was conducted on October 14, 1997 (see Section 2.2). All samples from the five sampling locations contained nondetectable concentrations of TPHC.
4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 9307 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, no longer exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 90029-32 at Building 9307.

Legend of Sample Identifications Camp Evans Area Wall Township, New Jersey

В	Sample from the bottom of the excavation
Ŵ	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
N	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
EDS	abuve). Soil leasted directly adjacent to the fill part of the tank ("Fill Bart Soil")
RED	Soil located beneath the fill port of the tank ("Banaath Fill Port")
9116CSP	Contaminated soil nile from the UST-0116 exceptation
	Deen Samnle
9196BE1A	Geoprobe boring performed on the east side of the LIST-9196 excavation to investigate contamination from the leaking LIST. Last
0100DE II (number denotes the boring number and last letter indicates which sample in the sequence
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected
RF(CT)	Samples was collected from return feed lines consisting of copper tubing
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VI	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST	Above ground storage tank
9105ASTB1	Sample collected at the former location of an AST at the specified building
DEL	Delineation sample to document the extent of contamination
SD	Sample collected from a storm drain
SW	Sample collected from a sidewall of a remedial excavation
CTR	Copper tubing run
CSP-1	Clean soil pile
	·

Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
UST9307B1	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
UST9307B2	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
UST9307B3	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
UST9307W	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
93070BS1**	-10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
93070BS2**	10/14/97	10/16/97	Soll	Post-Excavation	TPHC	OQA-QAM-025
93070BS3**	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	. OQA-QAM-025
9307B4**	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9307B5**	10/14/97	(instan 10/16/97	Soll	Post-Excavation	TPHC	OQA-QAM-025
9307B6**	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	QAA-QAM-025
9307N21**	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	🖞 OQA-QAM-025
9307W24tts	10/14/97-15	10/16/97	Sollic, I	Post-Excavation	TPHC -	OQA-QAM-025
9307S21	10/14/97	10/16/97	Soll	Post-Excavation	TPHC	OQA-QAM-025
UST9307E	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	oqa-qam-025
UST9307N	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
UST9307S	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
UST9307RF	9/10/97	9/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Building 9307, Camp Evans Area Wall Township, New Jersey

Note:

* TPHC Total petroleum hydrocarbons
 ** Samples collected to remediate contamination found in sample above.

							NJDEP Soil	
				Analytical	Method		Cleanup	Exceeds
.	Sample		Analysis	Method	Detection	Result	Criteria*	Cleanup
Sample ID	Laboratory ID	Sample Date	Date(s)	Used	Limit (mg/kg)	(mg/kg)	(mg/kg)	Criteria
		0/40/07	0/44 42/07	TOUO	404		40.000	
US19307B1	2961.01	9/10/97	9/11 - 13/97	TPHC	101	278.59	10,000	INO
US1930/B2	2981.02	9/10/97	9/11 - 13/97	TPHC	161	ND	10,000	No
UST9307B3	2981.03	9/10/97	9/11 - 13/97	TPHC	155	1,104.66	10,000	No
9307OBS21**,		a 10/14/99	10/16 - 17/97	TPHC	170	ND	10,000	No
9307OBS22**		- 10/14/99	-10/16 - 17/97	TPHC	163	ND	10,000	Nö
93070BS23**	g: 3065.03,		10/16 - 17/97	TPHC	163	ND	10,000	Ňo
9307B4**	3065 04	10/14/99	10/16 - 17/97	TPHC	159	¹ ND	10,000	No
9307B5**	3065.05	10/14/99	10/16 - 17/97	TPHC	154	ND ND	10,000	No
9307B6**		10/14/99	10/16 - 17/97	TPHC	153	'ND ''	10,000	Nő
9307N21	3065 07	10/14/99	10//16 = 17/97	TPHC	ale 157 ale	ND.	10,000	No
9307W21	3065 08	10/14/99	10/16 - 17/97	TPHG	155	ND 1	199010 ;000 11710	No 😳 👘
9307S21**	3065.09	10/14/99	10/16 - 17/97	TPHC	158	ND	10,000	No
UST9307W	2981.04	9/10/97	9/11 - 13/97	TPHC	165	ND	10,000	No
UST9307E	2981.05	9/10/97	9/11 - 13/97	TPHC	165	ND	10,000	No
UST9307N	2981.06	9/10/97	9/11 - 13/97	TPHC	158	201.16	10,000	No
UST9307S	2981.07	9/10/97	9/11 - 13/97	TPHC	160	ND	10,000	No
UST9307RF	2981.08	9/10/97	9/11 - 13/97	TPHC	161	476.74	10,000	No

Table 2 Post-Excavation Soil Sampling Results Building 9307, Camp Evans Area Wall Township, New Jersey

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

Not detected ND

TPHC **

Total petroleum hydrocarbons Samples collected to remediate contamination found in sample above.



9307.DWG ASC 01/19/99





APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 90029-32

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area							
Facility Street Address: Building 1207, DCSOPS-BID							
Municipality: <u>Wall Townshi</u>	County : <u>Monmouth</u>						
Block: 240, 241 and 242 L	ot(s): <u>240 (55.01, 55.02, 55.03 & 55.04), 241 (1), 242 (1.01 & 1.02</u>						
Telephone Number : (732) 23	9-2427						
B. Owner (RP)'s Name: US Army, CECOM							
Street Address: DCSOPS-E	BID, Bldg. 1207 City : Fort Monmouth						
State: <u>NJ</u> Zip: <u>07703</u>	Telephone Number : (732) 532-5052						
C. (Check as appropriate)	D. (Complete all that apply)						
• Site Investigation	 Assigned Case Manager : <u>Mr. Ian Curtis</u> UST Registration Number : <u>(7 digits)</u>: 90029 - <u>3</u> 						
Report (SIR) \$500 Fee	Incident Report Number (10 or 12 digits):						
Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>						
Report (RIR) \$1000 Fee							
E. Certification by the Su	bsurface Evaluator:						
The attached report	conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes						
Name: Kevin J. Phel	an Signature: <u>Kerrin J. Filelan</u> UST Cert. No.: <u>0018436</u>						
Firm: Tetra Tech EM, Inc.	Firm's UST Cert. Number: US00457						
Firm Address: <u>1 Bank Stre</u>	et, Suite 103 City: Rockaway						
State: <u>NJ</u> Zip: <u>07</u>	866 Telephone Number : (973) 9830507, Ext. 230						

)
F. c	ertification by the Responsible Party(ies) of the Facility:
The fol	lowing certification shall be signed [according to the requirements of N.J.A.C. 7:14B-1.7(b)]as follow
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
2.	submitted along with the certification; or 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
	accurate, and complete. I am aware that there are significant civil penalties for knowingly submittir
	false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree i
	direct or authorize the violation of any statute, I am personally liable for the penalties."
	Name (Print or Type): Mr. Charles Appleby
	Kane (Find of Type). The original of opploy
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	Signature:
	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703
	Date: November 30, 2000

APPENDIX B

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PHOTOGRAPHS OF UST CLOSURE UST NO. 90029-32



PHOTO 1: View of UST-9307 being removed from the ground (looking south/southwest).



PHOTO 2: View of a 1/4-inch hole on the underside of UST-9307 (located near the northern end the tank).



PHOTO 3: View of the sampling locations in the UST-9307 excavation (looking east/northeast).



PHOTO 4: View of UST-9307 staged on the west side of Building 9061 awaiting disposal and labeled with all required information.

APPENDIX C

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SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 90029-32

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

Client :	U.S. Army DPW. SELFM- Bldg. 173 Ft. Monmouth,	PW-EV NJ 07703		Lab. ID # : Date Rec'd: Analysis Sta Analysis Cor	2981 10-Sep-97 11-Sep-97 13-Sep-97	
Analysis: Matrix: Analyst:	OQA-QAM-025 Soil D.DEINHARDI	C		UST Reg. #: Closure #: DICAR #:		
Ext. Meth: Sample	Shake Field ID	Dilution Factor	Weight (g)	Location #:	BLDG.9307 MDL (mg/kg)	TPHC Result (mg/kg)
2981.01	UST-9307B1	1.00	15.38	94.89		278.59
2981.02	UST-9307B2	1.00	15.41	94.73	161	ND
2981.03	UST-9307B3	1.00	15.76	96.51	155	1104.66
2981.04	UST-9307W	1.00	16.37	87.07	165	ND
2981.05	UST-9307E	1.00	15.01	95.05	165	ND
2981.06	UST-9307N	1.00	16.15	92.05	158	201.16
2981.07	UST-9307S	1.00	15.18	96.82	160	ND
2981.08	UST-9307RF	1.00	15.79	92.21	161	476.74
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METHOD BLANK		1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

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

Client :	U.S. Army			Lab. ID # :		3065
	DPW. SELFM-I	PW-EV		Date Rec'd:		15-Oct-97
	Bldg. 173			Analysis Sta	16-Oct-97	
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	17-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARDI	r		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9307
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3065.01	9307-OBS21	1.00	15.13	91.51	170	ND
3065.02	9307-OBS22	1.00	15.70	91.65	163	ND
3065.03	9307-OBS23	1.00	15.74	91.82	163	ND
3065.04	9307-B4	1.00	15.25	96.72	159	ND
3065.05	9307-B5	1.00	15.90	96.00	154	ND
3065.06	9307-B6	1.00	15.86	97.11	153	ND
3065.07	9307-N21	1.00	15.33	97.53	157	ND
3065.08	9307-W21	1.00	15.77	96.30	155	ND
3065.09	9307-S21	1.00	15.35	97.13	158	ND
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METHOD BLANK		1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

APPENDIX D

UST DISPOSAL CERTIFICATE UST NO. 90029-32

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i :	The Drawing Board		NEORDEN ITEM # ULN74	
	STRÁLGH Origina	i t Bill of Lading L-Not Negotiable	5-4000 No. 001	
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Page 2/8

SMC Environmental Services Group

A Subsidiary of Searche Monocoment Corporation PO Hox 859 Valley Forgi - Perinsylvania 19482 Telephone (610) 265-2700

CERTIFICATE OF NON-HAZARDOUS VESSEL

FACILITY:	Camp Evans (115 Army)
	Wall NJ
	Building 9307
VESSEL	1,000 gallon steel tant
	(Formally #2 Fuel Oil)

This letter is to confirm that the vessel/vessels at the above referenced location has been physically entered (if necessary), degreased, washed/cleaned, and the material contained within has been completely removed and properly disposed. As of 3:00 A.M.P.M. , the above said vessel is certified gas free and has on heen cleaned following recommended procedures in API PUBLICATION 2015. Due to conditions that SMC Environmental Services Group has no control over, this certification is valid only until the vessel is received by the designated steel recycling facility. SMC Environmental Services Group will not be held liable for any damages which may occur after certification.

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

Signature

ite Manager

Print or Type Name Here

APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 90029-32

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	E LORCO PETROLEOM SERVICES	AD1-Box 5A Old Bridge, NJ (908) 721-0900 Fax (908) 721-0	08857 231-1	€ 6 .%Z		STAN STAN ORDE	DARD ECTION FORM
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	BLENDED OR ANY OTHER MATERIAL DEFINED	ED TO 40 CFR PART 261,						
	UNDER APPORT AGREES TO INDEMNIFY AND HOLD LORO	O HARMLESS FOR ANY						
	DAMAGES CUSIS, A HORITET STEED TO A BREACH OF THE ABOVE WARRANTY B	THE GENERATOR.						
	Generator certifies that the waste is 100				E	VERY 30 DAYS		
	In accordance the N.J.A.C. 7:26-12.1 et seq, LO		GENERATOR				· · ·	
	permits a accept the desired of the	~ ^ ~		NTITY In	accordance with	40 CFR 266 § 43() LORCO has no	tified
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United States Army Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 9392 Camp Evans Area

NJDEP UST Registration No. 90029-34

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APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of UST Closure
- Appendix C Soil Sample Analytical Data Package Appendix D UST Disposal Certificate
- Appendix E Waste Manifest for Off-site Transport of UST Contents

EXECUTIVE SUMMARY

UST Closure

On December 22, 1997, a steel underground storage tank (UST) was closed by removal at the Camp Evans area of the U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-34 (Fort Monmouth Identification No. 9392), was located south of Building 9392 in the Camp Evans area of Fort Monmouth. The UST was a 1,000-gallon No. 2 fuel oil tank. The UST fill port was located directly above the southern end of the tank.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). Two holes approximately 0.125-inches in diameter were noted in the UST and evidence of potentially contaminated soil was observed surrounding the UST fill port and the sides of the tank. Samples collected at the time the UST was removed contained concentrations of total petroleum hydrocarbons (TPHC) ranging from non-detect to 395.68 milligrams per kilogram (mg/kg). The total amount of soil removed from the excavation was 20 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9392 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in soil do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at the former location of the UST or associated piping. No further action is proposed with regard to the closure and site assessment of UST No. 90029-34 at Building 9392.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-34, was closed at Building 9392 at the Camp Evans area of U.S. Army Fort Monmouth, Fort Monmouth, Wall Township, New Jersey on December 22, 1997. The UST was a steel 1,000-gallon tank containing No. 2 fuel oil.

The UST removal was performed in accordance with the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for UST No. 90029-34 is included in Appendix A.

Based on an inspection of the UST, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that no significant historical discharges are associated with UST No. 90029-34 or associated piping.

This report was prepared based on information collected at the time of UST closure. Section 1 of this UST closure and site investigation report provides a site description and summarizes UST removal activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9392 is located in the main section of the Camp Evans area of the Fort Monmouth Army Base (adjacent to the intersection of Fourth Street and Fifth Street) as shown in Figure 1. UST No. 90029-34 was located south of Building 9392 and associated piping ran approximately 4 feet north and 26 feet west from the UST to Building 9392. The UST fill port area was located directly above the southern end of the tank. A site map is provided in Figure 1 showing the location of the UST removal relative to Building 9392.

1.2 UNDERGROUND STORAGE TANK EXCAVATION AND CLEANING

Because the UST had been placed out-of-service previously, SMC had drained the free product present in the associated piping and then excavated and removed the piping on October 8, 1997 in order to prepare for the installation of new product lines aboveground for the Aboveground Storage Tank (AST) which had been scheduled for installation at Building 9392 (the AST installation was subsequently canceled). The UST was not purged prior to the removal of the piping because of the low volatility of No. 2 fuel oil. Prior to the commencement of UST decommissioning activities on December 22, 1997, surficial soil was excavated to expose the UST. Once the UST was uncovered, SMC cut open the tank with a nonsparking pneumatic cutter and the remaining contents of the tank were removed with drum vacuum equipment. SMC completed cleaning the UST by wiping the interior out with oil absorbent pads.

After the UST was cleaned, it was removed from the excavation, staged temporarily on the asphalt driveway, and examined for holes. Two holes, approximately 0.125-inches in diameter, were observed by the Tetra Tech subsurface evaluator. Appendix B provides photographs of the tank. Soil around the UST was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for contamination. No evidence of contamination was observed or detected by the PID/FID except for soil located adjacent to the UST fill port and immediately adjacent to the tank. Visual and PID/FID soil screening was also performed along the former location of piping associated with the UST. No contamination was noted anywhere along the former piping length at the time that the piping was removed.

The sludges and residues removed from the UST were transported by Lorco Petroleum Company to its NJDEP-approved petroleum recycling and disposal facility in Old Bridge, New Jersey. Appendix E provides a copy of the waste manifest for the off-site transport of the tank contents.

1.3 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The cleaned tank was transported to Mazza and Sons, Inc. in Tinton Falls, New Jersey for disposal in compliance with all applicable regulations and laws. Appendix D provides a copy of the UST Disposal Certificate. Prior to transport, the UST was labeled with the following information:

- Site of origin
- Contact person
- NJDEP UST facility identification number

- Name of transporter and contact person
- Destination site and contact person

1.4 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results, soil adjacent to the UST fill port and immediately adjacent to the tank was contaminated. This soil was removed to the staging area for disposal off site at a later date and the clean excavated soil and imported clean fill were used to backfill the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: Kevin J. Phelan Employer: Tetra Tech EM Inc. Telephone No.: (973) 983-0507 NJDEP Certification No.: 0018436
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359 NJDEP Company Certification No.: 13461

 Hazardous Waste Hauler: Lorco Petroleum Company Contact Person: Dan MacKay Telephone No.: (732) 721-0900
 NJDEP Hazardous Waste Hauler No.: S6247

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP certified subsurface evaluator to identify potentially contaminated material. Soil excavated from around the associated piping, as well as the UST excavation sidewalls and bottom, did not exhibit any evidence of potential contamination at the time of the UST removal; however, soil adjacent to the UST fill port and immediately adjacent to the tank did exhibit indications of contamination and was transported to the soil staging area.

2.2 SOIL SAMPLING

On December 22, 1997, after UST removal, post-excavation soil samples 9392B1, 9392B2 (Duplicate of 9392B1), 9392B3, 9392N, 9392S, 9392E, 9392W, 9392DS, 9392VL, and 9392R/F were collected from nine locations in the UST excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the former UST location, and bottom samples were collected from 0 to 6-inches beneath the former UST location, or 9 to 9.5-feet below ground surface (bgs). The sidewall samples were collected from 8.5 to 9-feet bgs. Sample 9392DS was collected from the center of the excavation from 11 to 11.5-feet bgs. Sample 9392R/F was collected from next to Building 9392 along the former location of the return/feed line piping length of the excavation, which was approximately 30 feet long. Sample 9392R/F was collected from 0.5 to 1-feet bgs. Sample 9392OBS1 was collected from the overburden soil pile to verify that the pile was not contaminated and could be used as clean backfill for the excavation. In addition, sample 9392VL was collected beneath the former vent line location from 0.5 to 1-feet bgs. All samples were analyzed for TPHC and total solids.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of the UST and associated piping, post-excavation soil samples were collected from nine locations on December 22, 1997. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

All of the post-excavation soil samples collected on December 22, 1997, from the UST excavation, from below piping associated with the UST, and from the overburden soil pile contained concentrations of TPHC ranging from non-detect to 395.68 milligrams per kilogram (mg/kg).

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the UST excavation at Building 9392 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, do not exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the closure and site assessment of UST No. 90029-34 at Building 9392.

Legend of Sampic identifications Camp Evans Area Wall Township, New Jersey

В	Sample from the bottom of the excavation
Ŵ	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
Ν	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to
	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
	above).
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil").
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
	Samples was collected from return feed lines consisting of copper tubing.
	Samples collected from a second remote fill line for a particular UST excavation
RBI	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
CNEDM	the sample was collected.
	Another decignation for a confirmatory sample
	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
	sample could be collected for both lines
SCNT1	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
TP	Test pit/trench
HWAB	Hazardous waste area building (former location)
AST	Above ground storage tank
9105ASTB1	Sample collected at the former location of an AST at the specified building
DEL	Delineation sample to document the extent of contamination
SD	Sample collected from a storm drain
SW	Sample collected from a sidewall of a remedial excavation
CTR	Copper tubing run
CSP-1	Clean soil pile

.

Sample ID	Date Date Analy Sample ID Collected Started		Analysis tarted Matrix Sample Type			Analysis Method	
		:					
9392OBS1	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392B1	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392B2	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392B3	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392N	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392S	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392E	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392W	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392DS	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392VL	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	
9392R/F	12/22/97	12/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025	

Table 1 Summary of Post-Excavation Sampling Activities Building 9392, Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9392OBS1	3254.01	12/22/97	12/29 - 30/97	ТРНС	171	ND	10.000	No
9392B1	3254.02	12/22/97	12/29 - 30/97	TPHC	163	ND	10,000	No
9392B2	3254.03	12/22/97	12/29 - 30/97	TPHC	160	ND	10,000	No
9392B3	3254.04	12/22/97	12/29 - 30/97	TPHC	164	ND	10,000	No
9392N	3254.05	12/22/97	12/29 - 30/97	TPHC	186	ND	10,000	No
9392S	3254.06	12/22/97	12/29 - 30/97	TPHC	177	ND	10,000	No
9392E	3254.07	12/22/97	12/29 - 30/97	TPHC	195	ND	10,000	No
9392W	3254.08	12/22/97	12/29 - 30/97	TPHC	184	ND	10,000	No
9392DS	3254.09	12/22/97	12/29 - 30/97	TPHC	171	395.68	10,000	No
9392VL	3254.10	12/22/97	12/29 - 30/97	TPHC	180	196.17	10,000	No
9392R/F	3254.11	12/22/97	12/29 - 30/97	TPHC	178	ND	10,000	No

Table 2 Post-Excavation Soil Sampling Results Building 9392, Camp Evans Area Wall Township, New Jersey

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

TPHC Total petroleum hydrocarbon





9392.DWG -RAM- 01/25/99

APPENDIX A

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SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 90029-34
(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area				
Facility Street Address: Buil	ding 1207, DCSOPS-BID			
Municipality: <u>Wall Townshi</u>	p County : <u>Monmouth</u>			
Block: 240, 241 and 242 L	ot(s): <u>240 (55,01, 55.02, 55.03 & 55.04)</u> , <u>241 (1), 242 (1.01 & 1.02</u>			
Telephone Number : (732) 23	9-2427			
B. Owner (RP)'s Name: U	IS Army, CECOM			
Street Address: DCSOPS-I	3ID, Bidg. 1207 City : Fort Monmouth			
State: <u>NJ</u> Zip: <u>07703</u>	Telephone Number : (732) 532-5052			
C. (Check as appropriate)	D. (Complete all that apply)			
Site Investigation	• Assigned Case Manager : <u>Mr. Ian Curtis</u>			
Report (SIR) \$500 Fee	 UST Registration Number : (7 digits): 90029 - <u>34</u> Incident Report Number (10 or 12 digits): 			
Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>			
Report (RIR) \$1000 Fee				
E. Certification by the Su	bsurface Evaluator:			
The attached report	conforms to the specific reporting requirements of N.J.A.C. 7:26E · Yes			
Name: Kevin J. Phe	ian Signature: <u>Karin J. Phalan</u> UST Cert. No.: <u>0018436</u>			
Firm: Tetra Tech EM, Inc.	Firm's UST Cert. Number: US00457			
Firm Address: 1 Bank Stre	et, Suite 103 City: Rockaway			
State: NJ Zip: 07	866 Telephone Number : (973) 9830507, Ext. 230			

State: (NOTE et seq.	NJ Zip: <u>07866</u> Telephone Number : <u>(973) 9830507, Ext. 230</u> :: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-21)
F. c	ertification by the Responsible Party(ies) of the Facility:
The fol	lowing 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
2. 3.	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): Mr. Charles Appleby
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	Signature:
	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703
	Date: <u>November 30, 2000</u>

APPENDIX B

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PHOTOGRAPHS OF UST CLOSURE UST NO. 90029-34



PHOTO 1: View of UST-9392 being uncovered prior to cleaning and removal (looking northwest).



PHOTO 2: View of UST-9392 being removed from the ground (looking west).



PHOTO 3: View of the sampling locations in the UST-9392 excavation (looking south).



PHOTO 4: View of UST-9392 staged on the west side of Building 9061 awaiting disposal and labeled with all the required information.

APPENDIX C

SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 90029-34

and the second second

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

Client :	U.S. Army	Lab. ID # :	3254
	DPW. SELFM-PW-EV	Date Rec'd:	23-Dec-97
	Bldg. 173	Analysis Start:	29-Dec-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	30-Dec-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D. Deinhardt	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDG.S. 9392
			9009

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3254.01	9392-OBS1	1.00	15.48	88.56	171	ND
3254.02	9392-B1	1.00	15.32	94.19	163	ND
3254.03	9392-B2	1.00	15.55	94.34	160	ND
3254.04	9392-B3	1.00	15.38	93.45	164	ND
3254.05	9392-N	1.00	15.48	81.46	186	ND
3254.06	9392-S	1.00	15.37	86.53	177	ND
3254.07	9392-E	1.00	15.47	77.83	195	ND
3254.08	9392-W	1.00	15.58	82.05	184	ND
3254.09	9392-DS	1.00	15.44	89.01	171	395.68
3254.10	9392-VL	1.00	15.38	85.10	180	196.17
3254.11	9392-R/F	1.00	15.32	86.02	178	ND
3254.12	9009-OBS1	1.00	15.53	86.78	174	ND
3254.13	9009-OBS2	1.00	15.46	85.19	178	ND
		1				
	1	1				
METHOD BLANK	29-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

1

Laboratory Director

APPENDIX D

UST DISPOSAL CERTIFICATE UST NO. 90029-34

· · ·	The Drawing Board" PC Brc 1944 - Junior Crestol-and Con Balline: 1400-1814050		RECR	DER ITEM # BLN74
	STRAIGHT BILL OF LADING ORIGINAL - NOT NEGOTIABLE		: O	27
•	SMC ENVIRONMENTAL SERVICES GROU	P	Cervier No.	
•	British Mazza + Sons iNC DE U.S. Army	Can	ng Eu	ans
· · ·	Burning TW. ton Falls NTraceD7753 and Wall 1	<u>93</u> 27	12	19
6.5-2		<u>}</u>	atun	
	Me Etherine in Bridge Printer Martine	(Bubing Ba Garranian)	Plate	
	- 1- 1,000 (Sallon D. Sit Sval			
	Building# 9392			
	TANK # 90029-34			
	AGNET C.Q.D. TO: 4 ACORESS COD Ami: \$		C.O.D. FFE: PREPAID D S COLLECT D	
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SMC Environmental Services Group A Subsidiary of Science Management Corporation

P.O. Box 859 Valley Forge, Pennsylvania 19482 Telephone (610) 265-2700



This letter is to confirm that the vessel/vessels at the above referenced location has been physically entered (if necessary), degreased, washed/cleaned, and the material contained within has been completely removed and properly disposed. As of 3:00 A.M/R.M. on 22 2 1, the above said vessel is certified gas free and has been cleaned following recommended procedures in API PUBLICATION 2015. Due to conditions that SMC Environmental Services Group has no control over, this certification is valid only until the vessel is received by the designated steel recycling facility. SMC Environmental Services Group will not be held liable for any damages which may occur after certification.

SMC ENVIRONMENTAL SERVICES GROUP SIGNATURE OF CERTIFICATION

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APPENDIX E

WASTE MANIFEST FOR OFF-SITE TRANSPORT OF UST CONTENTS UST NO. 90029-34

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GENERATOR CERTIFICATION

I hereby certify to the best of my knowledge that the waste described on Hazardous Waste Manifest No. 979_______dated 12 3197

is generated by one or more of the following processes and does not contain more than 2 ppm polychlorinated biphenyls (P.C.B.'s) and does not display any characteristic or contain any hazardous constituents other than for which waste oils are listed in New Jersey.

- X721: Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages.
- X722: Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks.
- X723: Waste oil and bottom sludge generated by gasoline stations when gasoline and oil tanks are tested, cleaned or replaced.
- X724: Waste petroleum oil generated when tank trucks or other vehicles or mobile vessels are cleaned, including, but not limited to, oil ballast water from product transport units of boats, barges, ships or other vessels.
- X725: Oil spill cleanup residue which: A. is contaminated beyond saturation; or B. the generator fails to demonstrate that the spill material was not one of the listed hazardous waste oils.
- X726: The following used and unused waste oils: metal working oils; turbine lubricating oils, diesel lubricating oils, and quenching oils.
- X728. Bottom sludge generated from the processing, blending, and treatment of waste oil in waste oil processing facilities.

*This used oil product was tested on site, before pumping with a dexsil C.D.T. test kit. Results: _____ PPM halogens.

I am duly authorized to sign said certification.

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United States Army Fort Monmouth, New Jersey

Underground Storage Tank Remedial Investigation Report

Building 9007 Camp Evans Area

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1.0	EXPI	ORATORY/REMEDIAL ACTIVITIES	2
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Table 1	Summary of Remedial Sampling Activities
Table 2	Remedial Soil Sampling Results (TPHC)
Table 3	

FIGURES

Figure 1	Building 9007 – Remedial Excavation Location Map
Figure 2	Building 9007 – Remedial Excavation and Soil Sample Locations

APPENDICES

- Appendix ASigned Site Assessment SummaryAppendix BPhotographs of Remedial Excavation
- Appendix C Soil Sample Analytical Data Package

EXECUTIVE SUMMARY

Remedial Excavation

Between January 21 through February 7, 2000 and July 19 through August 8, 2000, remedial excavation and sampling was performed at the Camp Evans area of the U.S. Army Fort Monmouth, Wall Township, New Jersey. The remedial excavation was located south of Building 9007 in the Camp Evans area and was performed to remediate contamination found during the excavation of a sanitary sewer.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and Versar, Inc. (Versar) (formerly SMC Environmental Services Group). Samples collected at the time the remedial excavations were performed contained concentrations of total petroleum hydrocarbons (TPHC) ranging from non-detect to 29,847.70 milligrams per kilogram (mg/kg). After additional soil was excavated and removed, soil remaining in the excavation contained concentrations of TPHC ranging from non-detectable to 7,954.53 mg/kg. Samples collected at the same time for volatile organic compound (VOC) analysis revealed non-detectable concentrations of VOCs. The total amount of soil removed from the excavation was 239 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC and VOC concentrations in soil in this area near Building 9007 do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg. No further action is proposed with regard to the remedial TPHC excavation at Building 9007.

1.0 EXPLORATORY/REMEDIAL ACTIVITIES

A remedial excavation was performed south of Building 9007 at the Camp Evans area of the U.S. Army Fort Monmouth, Wall Township, New Jersey between January 21 through February 7, 2000 and July 19 through August 8, 2000. The excavation was performed to remediate known TPHC contamination that was discovered during the excavation of a sanitary sewer line.

The remedial excavation was performed in accordance with the Site Assessment Section of the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form is included in Appendix A.

Based on an inspection of the remedial excavation, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that a significant historical discharge and/or contaminated backfill was associated with this area.

This report was prepared based on information collected at the time that the remedial excavation was performed. Section 1 of this remedial investigation report provides a site description and summarizes remedial excavation activities. Section 2 describes the remedial site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9007 is located in the northern portion of the main section of the Camp Evans area of the Fort Monmouth Army Base (adjacent to Monmouth Boulevard and near the intersection of Monmouth Boulevard and Marconi Road), as shown in Figure 1. The remedial excavation was located south of Building 9007. A site map is provided in Figure 1 showing the location of the remedial excavation relative to Building 9007.

1.2 REMEDIAL EXCAVATION ACTIVITIES

Tetra Tech began excavation at the former location of the sanitary sewer line south of Building 9007 where the contamination had first been discovered. Subsequently, as additional contamination was discovered, the excavation was extended to the northeast and southwest. During excavation activities, soil was screened visually and with a photoionization detector (PID)/flame ionization detector (FID). After contaminated soil had been removed and transported to the staging area, post-excavation soil samples were collected to document that the excavation was clean or that any contamination that remained was below the NJDEP soil cleanup criteria of 10,000 mg/kg for total organic contaminants.

1.3 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results and TPHC results from post-excavation soil samples, soil in the remedial excavation varied from uncontaminated to significantly contaminated (see Figure 2 and Table 2). All significantly contaminated soil was removed to the staging area for disposal off site at a later date, and imported clean fill was used to backfill the excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and Versar personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by Versar. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990; revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office. The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: Kevin J. Phelan Employer: Tetra Tech EM Inc. Telephone No.: (973) 983-0507
 NJDEP Certification No.: 0018436
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP-certified subsurface evaluator to identify potentially contaminated material. Soil removed from the excavation sidewalls and bottom did exhibit evidence of contamination at the time the remedial excavation was performed, and was removed to the staging area.

2.2 SOIL SAMPLING

On January 21, 2000, two test trenches were excavated to delineate the extent of contamination, and postexcavation samples TP-A(1), TP-A(2), and TP-A(3) were collected from three locations in the first test trench. Figure 2 presents the sampling locations (see Appendix B for photographs of excavations). Sample TP-A(1) was collected from 1 to 1.5 feet below ground surface (bgs), sample TP-A(2) was collected from 4 to 4.5 feet bgs, and sample TP-A(3) was collected from 5 to 5.5 feet bgs. All samples were analyzed for TPHC and total solids.

Analytical results for the original post excavation samples revealed 22,300.25 mg/kg TPHC at the TP-A(1) sample location and 17,041.22 mg/kg TPHC at the TP-A(2) sample location. These concentrations significantly exceed 1,000 mg/kg TPHC, which is the NJDEP's criterion for additional soil removal/remediation or for required volatile organic compound (VOC) sampling. As a result, Tetra Tech and Versar continued to excavate contaminated soil and collect post-excavation samples to document soil conditions and delineate the extent of contamination. This additional excavation and sampling occurred through February 9, 2000. Analytical results varied significantly from non-detect to 29,847.70 mg/kg TPHC (see Figure 2 and Table 2 for soil sample locations and analytical results).

Due to budget limitations, Tetra Tech and Versar completed the initial remedial excavation and backfilled the excavation with imported clean backfill material. At the time the initial excavation was backfilled, analytical results indicated that the excavation was clean except for the eastern end of the excavation where sample analytical results ranged in TPHC concentration from 231.71 to 9,740.25 mg/kg. These results were reported to Fort Monmouth.

Upon approval of an additional scope of work (including the heavy metal remediation in the Building 9007 footprint), Tetra Tech and Versar resumed excavating contaminated soil from the area on July 19 through August 8, 2000. The final sample analytical results (see Figure 2 and Table 2) revealed TPHC concentrations of 363.21 to 8,684.79 mg/kg; however, samples collected for VOC analysis at the same time as the final TPHC samples revealed non-detectable concentrations of VOCs.

During preparation of this remedial investigation report, it was discovered that a sample at the western end of the excavation had a result of 1,352.06 mg/kg TPHC, which required that a VOC sample be collected and analyzed. As a result, Tetra Tech and TVS completed a series of four Geoprobe borings on November 8, 2000 (four borings were conducted to locate the same contamination that had been observed previously). Tetra Tech collected a sample and duplicate sample for TPHC and VOC analysis. Sample analytical results revealed non-detectable concentrations of TPHC, and the VOC concentrations were below the method detection limits (see Appendix C for sample analytical data package).

In addition to the above-mentioned Geoprobe borings and sampling, a polychlorinated biphenyls (PCB) result of 2.065 mg/kg was found during a review of the results of sediment sampling at the bottom of the storm sewer manhole. Tetra Tech and Versar therefore re-excavated and removed the manhole on November 13, 2000 and collected post-excavation samples along the bottom and sidewalls of the excavation for TPHC, VOCs, and PCB analysis (see Figure 2 and Table 2). The laboratory analytical results indicated that TPHC concentrations ranged from non-detectable to 385.54 mg/kg, VOC concentrations were below the method detection limit, and PCB concentrations were non-detectable.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after removal of contaminated soil, post-excavation soil samples were collected from seventy locations in and surrounding the remedial excavation. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential

9007-5

direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

All of the post-excavation soil samples collected on January 30, 1998 and February 10, 1998, contained concentrations of TPHC ranging from non-detect to 3,300.15 mg/kg. The samples collected on March 2, 1998 contained non-detectable concentrations of TPHC.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the remedial excavation at Building 9007 were below the NJDEP soil cleanup criterion.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg no longer exists in the former location of the sanitary sewer line and remedial excavation; therefore, no further action is proposed with regard to the site assessment at Building 9007.

Legend of Sample identifications Camp Evans Area Wall Township, New Jersey

	Wall Township, New Jersey
Р	Crucilla from the bottom of the evenuation
D \\\/	Samples from the bollom of the excavation
vv F	Samples from the east sidewall of the excavation
L. N	Samples from the parth sidewall of the excavation
N C	Samples from the pouth sidewall of the excavation
J DE	Samples from the south stoewall of the excavation
	Sample from beneath the former location of the vent line to the LICT
	Sample from beneatil the former location of the vent line to the UST.
063	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
	above).
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil").
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNERM	Confirmatory sample to confirm that contamination has been removed
	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
001174	sample could be collected for both lines
	Sample collected at a location of suspected contamination
	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
	Lest pit/trench
	Hazaroous waste area building (former location)
AOI 040EAOTD4	Above ground storage tank
	Delineation complete degrament the extent of contemination
SD	Semple collected from a storm drain
SW	Sample collected from a storm diality
CTR	Copportubing run
005-1	orean soir pire

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Table 1 Summary of Remedial Sampling Activities Building 9007, Camp Evans Area Wall Township, New Jersey

	Date	Date Analysis			Analytical	
Sample ID	Collected	Started	Matrix	Sample Type	Parameters*	Analysis Method
ΤΡΔ(1)	1/21/00	1/24/00	Soil	Post-Excavation	трнс	00A-0AM-025
$TP\Delta(2)$	1/21/00	1/24/00	Soil	Post-Excavation	TPHC	00A-04M-025
TPA(3)	1/21/00	1/24/00	Soil	Post-Excavation	TPHC	
	1/28/00	1/31/00	Soil	Post-Excavation	трис	00A-0AM-025
900751	1/28/00	1/31/00	Soil	Post-Excavation	TPHC	00A-0AM-025
900752	1/28/00	1/31/00	Soil	Post-Excavation	TPHC	00A-0AM-025
900782	1/28/00	1/31/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007E1	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	00A-04M-025
9007E1	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	OOA_OAM_025
9007BMH	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007B3	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	000-00M-025
9007B4	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	00A-04M-025
9007D4	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	00A-0AM-025
000783	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	00A-0AM-025
000754	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	00A-04M-025
000704 0007N3	2/3/00	2/4/00	Soil	Post-Excavation	TPHC	00A-0AM-025
00071NJ	2/4/00	2/7/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007W/R1	2/4/00	2/7/00	Soil	Post-Excavation	TPHC	00A-04M-025
9007\\//\$1	2/4/00	2/7/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007W/S1	2/4/00	2/7/00	Soil	Post-Excavation	TPHC	00A-0AM-025
900710/001	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
900710/001	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007\\/\\\3	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007W/S2	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007CBE1	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007CBE2	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
90076812	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	OOA-OAM-025
0007E/N1	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
9007E/N1	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-0AM-025
	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A_0AM-025
0007E/E2	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A-04M-025
9007E/S2	2/7/00	2/8/00	Soil	Post-Excavation	TPHC	00A_0AM_025
9007L/02	2/9/00	2/10/00	Soil	Post-Excavation	TPHC	
9007/M)SP1	2/9/00	2/10/00	Soil	Post-Excavation	TPHC	
	-10100		001		1110	C GULLE GULLINI - O Z O

Note:

Table 1 Summary of Remedial Sampling Activities Building 9007, Camp Evans Area Wall Township, New Jersey

	Date	Date Analysis			Analytical	
Sample ID	Collected	Started	Matrix	Sample Type	Parameters*	Analysis Method
9007(F)_OSP(A)	7/10/00	7/21/00	- Soil	Post-Excavation	трнс	
9007(E)_B3	7/10/00	7/21/00	Soil	Post-Excavation	TPHC	
9007(E)-B3	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	0AQ-QAM-025
9007(E)-B2	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	0A0_0AM-025
$9007(E)_B(US)$	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	OAO_OAM_025
9007(E)-N2	7/19/00	7/21/00	Soil	Post-Excavation	трис	
9007(E)-N3	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	0AQ-QAM-025
9007(E)-W2	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	0AQ-QAM-025
9007(E)-E3	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	OAO-OAM-025
9007(E)-S3	7/19/00	7/21/00	Soil	Post-Excavation	TPHC	0AQ-0AM-025
9007(E)-W3	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	0AQ-QAM-025
9007(E)-B5	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-N4	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-S4	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-E5	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-N5	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-N6	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E)-S5	7/31/00	8/1/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-B1	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-N1	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-N2	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-W1	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-S1	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025
9007(E/NE)-E1	8/8/00	8/10/00	Soil	Post-Excavation	TPHC	OAQ-QAM-025

Note:

Table 2 Remedial Soil Sampling Results (TPHC) Building 9007, Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
TPA(1)	5112.01	1/21/00	1/24/00	TPHC	170	22,300.25	10,000	Yes
TPA(2)	5112.02	1/21/00	1/24/00	TPHC	160	17,041.22	10,000	Yes
TPA(3)	5112.03	1/21/00	1/24/00	TPHC	168	265.12	10,000	No
TPD(1)	5128.01	1/28/00	1/31/00	TPHC	173	ND	10,000	No
9007S1	5128.02	1/28/00	1/31/00	TPHC	162	29,847.70	10,000	Yes
9007S2	5128.03	1/28/00	1/31/00	TPHC	175	3,451.19	10,000	Yes
9007B2	5128.04	1/28/00	1/31/00	TPHC	174	ND	10,000	No
9007E1	5139.04	2/2/00	2/3-4/00	TPHC	182	1,978.76	10,000	Yes
9007N1	5139.05	2/2/00	2/3-4/00	TPHC	180	ND	10,000	No
9007BMH	5139.06	2/2/00	2/3-4/00	TPHC	191	ND	10,000	No
9007B3	5142.01	2/3/00	2/4/00	TPHC	194	ND	10,000	No
9007B4	5142.02	2/3/00	2/4/00	TPHC	190	ND	10,000	No
9007N2	5142.03	2/3/00	2/4/00	TPHC	186	ND	10,000	No
9007S3	5142.04	2/3/00	2/4/00	TPHC	187	ND	10,000	No
9007S4	5142.05	2/3/00	2/4/00	TPHC	167	378.91	10,000	No
9007N3	5142.06	2/3/00	2/4/00	TPHC	192	463.35	10,000	No
9007W/N1	5145.03	2/4/00	2/7/00	TPHC	170	8,615.54	10,000	Yes
9007W/B1	5145.04	2/4/00	2/7/00	TPHC	180	ND	10,000	Yes
9007W/S1	5145.05	2/7/00	2/8-9/00	TPHC	175	ND	10,000	No
9007W/W1	5154.01	2/7/00	2/8-9/00	TPHC	174	961.57	10,000	Yes
9007W/W2	5154.02	2/7/00	2/8-9/00	TPHC	177	1,352.06	10,000	No
9007W/W3	5154.03	2/7/00	2/8-9/00	TPHC	172	368.38	10,000	No
9007W/S2	5154.04	2/7/00	2/8-9/00	TPHC	185	275.91	10,000	No
9007CBF1	5154.05	2/7/00	2/8-9/00	TPHC	161	210.75	10,000	No
9007CBF2	5154.06	2/7/00	2/8-9/00	TPHC	173	396.10	10,000	No
9007E/B1	5154.07	2/7/00	2/8-9/00	TPHC	169	7,032.19	10,000	Yes
9007E/N1	5154.08	2/7/00	2/8-9/00	TPHC	163	9,740.35	10,000	Yes
9007E/S1	5154.09	2/7/00	2/8-9/00	TPHC	172	793.13	10,000	No

Note:

Samples collected on 2/6/98 were re-analyzed between 2/19/98 and 2/21/98 after a malfunction was discovered in the laboratory instrumentation. The sample results were unchanged after the re-analysis.

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria

ND Not detected

TPHC Total petroleum hydrocarbons

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9007E/E1	5154 10	2/7/00	2/8 0/00	трис	177	1 500 50	10.000	Vor
9007E/E2	5154.10	2/7/00	2/8-9/00	TPHC	170	2 100 87	10,000	Vos
9007E/S2	5154 12	2/7/00	2/8-9/00	TPHC	170	231 71	10,000	No
9007W/CS1	5158.01	2/9/00	2/10-11/00	TPHC	191	1 332.04	10,000	Yes
9007(M)SP1	5158.03	2/9/00	2/10-11/00	TPHC	175	1,657,61	10,000	Yes
9007(E)-OSP(A)	5546.01	7/19/00	7/21-22/00	TPHC	164	1.184.85	10.000	Yes
9007(E)-B3	5546.02	7/19/00	7/21-22/00	TPHC	178	1.326.19	10,000	Yes
9007(E)-B4	5546.03	7/19/00	7/21-22/00	TPHC	177	7.151.44	10.000	Yes
9007(E)-B2	5546.04	7/19/00	7/21-22/00	TPHC	171	3,675.71	10,000	Yes
9007(E)-B(U,S)	5546.05	7/19/00	7/21-22/00	TPHC	170	16.295.04	10,000	Yes
9007(E)-N2	5546.06	7/19/00	7/21-22/00	TPHC	176	1,005.33	10,000	Yes
9007(E)-N3	5546.07	7/19/00	7/21-22/00	TPHC	168	623.84	10,000	No
9007(E)-W2	5546.08	7/19/00	7/21-22/00	TPHC	178	ND	10,000	No
9007(E)-E3	5546.09	7/19/00	7/21-22/00	TPHC	175	ND	10,000	No
9007(E)-S3	5546.10	7/19/00	7/21-22/00	TPHC	179	6,945.81	10,000	Yes
9007(E)-W3	5576.01	7/31/00	8/1-2/00	TPHC	184	458.18	10,000	No
9007(E)-B5	5576.02	7/31/00	8/1-2/00	TPHC	175	988.64	10,000	No
9007(E)-N4	5576.03	7/31/00	8/1-2/00	TPHC	161	ND	10,000	No
9007(E)-S4	5576.04	7/31/00	8/1-2/00	TPHC	188	ND	10,000	No
9007(E)-E5	5576.05	7/31/00	8/1-2/00	TPHC	172	9,496.72	10,000	No
9007(E)-N5	5576.06	7/31/00	8/1-2/00	TPHC	178	10,645.53	10,000	Yes
9007(E)-N6	5576.07	7/31/00	8/1-2/00	TPHC	180	5,055.53	10,000	No
9007(E)-S5	5576.08	7/31/00	8/1 -2 /00	TPHC	180	8,422.70	10,000	No
9007(E/NE)-B1	5610.01	8/8/00	8/10/00	TPHC	78	1,578.89	10,000	No
9007(E/NE)-N1	5610.02	8/8/00	8/10/00	TPHC	77	363.21	10,000	No
9007(E/NE)-N2	5610.03	8/8/00	8/10/00	TPHC	78	426.34	10,000	No
9007(E/NE)-W1	5610.04	8/8/00	8/10/00	TPHC	80	603.09	10,000	No
9007(E/NE)-S1	5610.05	8/8/00	8/10/00	TPHC	80	5,391.84	10,000	No

Table 2 Remedial Soil Sampling Results (TPHC) Building 9007, Camp Evans Area Wall Township, New Jersey

Note:

Samples collected on 2/6/98 were re-analyzed between 2/19/98 and 2/21/98 after a malfunction was discovered in the laboratory instrumentation. The sample results were unchanged after the re-analysis.

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria

ND Not detected

TPHC Total petroleum hydrocarbons

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9007(E/NE)-E1	5610.06	8/8/00	8/10/00	TPHC	81	8.684.79	10,000	No
B-9007(W)-1	5840.01	11/8/00	11/9/00	TPHC	174	ND	10,000	No
B-9007(W)-2	5840.02	11/8/00	11/9/00	TPHC	174	ND	10,000	No
9007-EPS25	5852.01	11/13/00	11/14/00	TPHC	168	385.54	10,000	No
9007-B6	5852.02	11/13/00	11/14/00	TPHC	185	ND	10,000	No
9007-NW1	5852.03	11/13/00	11/14/00	TPHC	173	ND	10,000	No
9007-SW1	5852.04	11/13/00	11/14/00	TPHC	169	ND	10,000	No
9007-NE1	5852.05	11/13/00	11/14/00	TPHC	175	ND	10,000	No
9007-SE1	5852.06	11/13/00	11/14/00	TPHC	171	ND	10,000	No
9007-SE2	5852.07	11/13/00	11/14/00	TPHC	185	ND	10,000	No
9007-SW1	5852.08	11/13/00	11/14/00	TPHC	169	ND	10,000	No
9007-SW2	5852.10	11/13/00	11/14/00	TPHC	172	ND	10,000	No

Table 2 Remedial Soil Sampling Results (TPHC) Building 9007, Camp Evans Area Wall Township, New Jersey

Note:

Samples collected on 2/6/98 were re-analyzed between 2/19/98 and 2/21/98 after a malfunction was discovered in the laboratory instrumentation. The sample results were unchanged after the re-analysis.

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria

ND Not detected

TPHC Total petroleum hydrocarbons













APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area						
Facility Street Address: Buil	ding 1207, DCSOPS-BID					
Municipality: <u>Wall Townshi</u> j	p County : <u>Monmouth</u>					
Block: <u>240, 241 and 242</u> L	ot(s): 240 (55.01, 55.02, 55.03 & 55.04), 241 (1), 242 (1.01 & 1.02					
Telephone Number : (732) 23	9-2427					
B. Owner (RP)'s Name: U	S Army, CECOM					
Street Address: DCSOPS-I	Street Address: DCSOPS-BID, Bldg. 1207 City : Fort Monmouth					
State: NJ Zip: 07703 Telephone Number : (732) 532-5052						
C. (Check as appropriate)	D. (Complete all that apply)					
Site Investigation	• Assigned Case Manager : <u>Mr. Ian Curtis</u>					
Report (SIR) \$500 Fee	UST Registration Number : (7 digits): <u>900295</u> A Incident Report Number (10 or 12 digits):					
Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>					
Report (RIR) \$1000 Fee						
E. Certification by the Subsurface Evaluator:						
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes						
Name: Kevin J. Phelan Signature: <u>Xervin J. Phelan</u> UST Cert. No.: 0018436						
Firm: Tetra Tech EM, Inc. Firm's UST Cert. Number: US00457						
Firm Address: 1 Bank Street, Suite 103 City: Rockaway						
State: NJ Zip: 07866 Telephone Number : (973) 9830507, Ext. 230						
State: <u>NJ_</u>	Zip: 07866 Telephone Number : (973) 9830507, Ext. 230					
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(NOTE: Certifica et seq.)	tion numbers required only if work was conducted on USTs regulated per N.J.S.A. 58:10A-2					
F. Certificatio	n by the Responsible Party(ies) of the Facility:					
The following ce	rtification shall be signed [according to the requirements of N.J.A.C. 7:14B-1.7(b)]as follows:					
1. For a C	prporation by a person authorized by a resolution of the board of directors to sign the					
docume submitte 2. For a par 3. For a mu elected C	nt. A copy of the resolution, certified as a true copy by the secretary of the corporation, shall be d along with the certification; or thership or sole proprietorship, by a general partner or the proprietor, respectively; or unicipality, State, federal or other public agency by either a principal executive officer or ranking 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 1 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 (F	Print or Type): Mr. Charles Appleby					
Title: <u>BI</u>	RAC Environmental Coordinator, Evans Area					
Signatur	nJDEP Subsurface Evaluator # 2056					
Compar	y Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703					
Date: N	ovember 30, 2000					

APPENDIX B

PHOTOGRAPHS OF REMEDIAL EXCAVATION

.



PHOTO 1: View of backhoe beginning UST-9007 excavation (looking northeast).



PHOTO 2: View of contamination in west sidewall of UST-9007 excavation (looking southwest).



PHOTO 3: View of heavily-stained pieces of former wooden dry well in UST-9007 excavation.



PHOTO 4: View of storm sewer manhole in western end of UST-9007 excavation (looking southwest).



PHOTO 5: View of trackhoe continuing to excavate east end of UST-9007 excavation (looking north).



PHOTO 6: View of eastern end of UST-9007 excavation (looking north).



PHOTO 1: View of TP-9043 (Excavation C) where copper tubing with traces of fuel oil/gasoline was found (looking north).



PHOTO 2: View of former AST location at Building 9004 prior to excavation of test trenches (looking south/southwest).



PHOTO 3: View of remedial excavation at Building 9004 to remove contamination caused by a former aboveground storage tank (AST) (looking east/southeast).



PHOTO 4: View of remedial excavation at Building 9090 to remove contamination caused by a former UST that had been removed previously (looking north).



PHOTO 5: View of exploratory test trench adjacent to a former building pad along Watson Avenue (looking south).



PHOTO 7: View of backhoe beginning to reexcavate storm sewer manhole to remediate PCB contamination in UST-9007 excavation (looking west).



PHOTO 8: View of excavation after removal of manhole (looking northwest).



PHOTO 9: View of final site restoration of UST-9007 excavation (looking northeast).

APPENDIX C

.

SOIL SAMPLE ANALYTICAL DATA PACKAGE

Client :	U.S. Army	Project # :	5112
	DPW. SELFM-PW-EV	Location :	Bldg.9007
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	21-Jan-00
Matrix :	Soil	Date Extracted :	24-Jan-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	24-Jan-00
Injection Volume	: 1uL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5112.01	TP-A(1)	10.00	15.35	90.03	170	22300.25
5112.02	TP-A(2)	10.00	15.34	95.45	160	17041.22
5112.03	TP-A(3)	1.00	15.27	91.68	168	265.12
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METHOD BLANK	TBLK316	1.00	15.00	100.00	157	ND

ND = Not Detected

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No.

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Daniel K. Wright

Laboratory Director

Client :	U.S. Army DPW. SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703	Project # : Location : UST Reg. # :	5128 Bldg.9007
Analysis :	OQA-QAM-025	Date Received :	28-Jan-00
Matrix :	Soil	Date Extracted :	31-Jan-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	31-Jan-00
Injection Volume :	luL	Analyst:	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5128.01	TP-D(1)	1.00	15.06	90.08	173	ND
5128.02	9007-S1	10.00	15.02	96.50	162	29847.70
5128.03	9007-S2	1.00	15.21	88.51	175	3451.19
5128.04	9007-B2	1.00	15.15	89.35	174	ND
METHOD BLANK	TBLK318	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright

Laboratory Director

Client :	U.S. Army	Lab. ID # :	5128.02
	DPW. SELFM-PW-EV	Date Rec'd:	1/28/00
	Bldg. 173	Extraction Date:	1/31/00
	Ft. Monmouth, NJ 07703	Analysis Date:	2/1/00
Analysis:	SW-846 Method 8082	Location :	Bldg. 9007
Matrix:	Soil		
Analyst:	T. Frankovich	Field ID:	9007-S1(4.5'-5')

.

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	96.50	0.0116	ND	0.49	10.04
Arochlor 1221	1	96.50	0.0213	ND	0.49	10.04
Arochlor 1232	1	96.50	0.0144	ND	0.49	10.04
Arochlor 1242	1	96.50	0.0165	ND	0.49	10.04
Arochlor 1248	1	96.50	0.0066	ND	0.49	10.04
Arochlor 1254	1	96.50	0.0041	ND	0.49	10.04
Arochlor 1260	1	96.50	0.0037	ND	0.49	10.04

.

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client: U.S. Army

DPW, SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703 Lab ID #: 5128.02 Sample Received: 01/28/00 Sample Matrix: Solid

Site: Evans Bldg. 9007

Field ID: 9007-S1(4.5'-5')

Method of Digestion: EPA SW-846 Method 3051A Method of Analysis: EPA SW-846 Method 6010B, 7471A

	····			
Element	Date of	Result	Soil Cleanup	MDL
	Analysis		Criteria *	
Aluminum	01/31/00	3840	NLE	1.884
Antimony	01/31/00	ND	14	0.377
Arsenic	01/31/00	0.377	20	0.377
Barium	01/31/00	9.95	700	0.094
Beryllium	01/31/00	0.094	2	0.094
Cadmium	01/31/00	ND	39	0.094
Calcium	01/31/00	54.1	NLE	3.768
Chromium	01/31/00	5.07	NLE	0.094
Cobalt	01/31/00	1.19	NLE	0.094
Copper	01/31/00	19.2	600	0.565
Iron	01/31/00	3090	NLE	1.884
Lead	01/31/00	2.07	400	0.377
Magnesium	01/31/00	202	NLE	3.768
Manganese	01/31/00	16.0	NLE	0.094
Mercury	01/31/00	ND	14	0.022
Nickel	01/31/00	6.63	250	0.094
Potassium	01/31/00	279	NLE	3.768
Selenium	01/31/00	ND	63	0.565
Silver	01/31/00	ND	110	0.565
Sodium	01/31/00	154	NLE	3.768
Thallium	01/31/00	ND	2	0.565
Vanadium	01/31/00	24.9	370	0.188
Zinc	01/31/00	18.1	1500	0.188

TAL-METALS RESULTS SUMMARY (mg/Kg)

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established * Residential Direct Contact Soil Cleanup as per N.J.A.C. 7:26:D 5/12/99

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

Data File	VB005730.D	Sample Name	5131.01
Operator	Skelton	Field ID	Trip Blank
Date Acquired	4 Feb 2000 4:03 pm	Sample Multiplier	1

					Regulatory		
CAS#	Compound Name	<u>R.T.</u>	Response	Result	Level (ug/l)-	MDL	Qualifier
107028	Acrolein			not_detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	l
1634044	Methyl-tert-Butyl ether	L		not detected	70	0.16 ug/L	
108203	Di-isopropyl ether			not detected	nle	<u>0.25 ug/L</u>	
<u> </u>	Dichlorodifluoromethane			not detected	nle	<u>1.68_ug/L</u>	
74-87-3	Chloromethane	<u> </u>		not detected	30	<u>1.16_ug/L</u>	I
75-01-4	Vinyl Chloride		· · · · · · · · · · · · · · · · · · ·	not detected	5	<u>1.06 ug/L</u>	
74-83-9	Bromomethane	L		not_detected	10	<u>1.10 ug/L</u>	
75-00-3	Chloroethane			not detected	nle	1.01_ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.24_ug/L	
67-64-1	Acetone			not detected	700	<u>1.36 ug/L</u>	
75-15-0	Carbon Disulfide			not detected	nie	0.46 ug/L	
75-09-2	Methylene Chloride	L		not detected	2	<u>0.24 ug/L</u>	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.16_ug/L	·
75-34-3	1,1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinyl Acetate	L	·	not detected	nle	0.78 ug/L	
78-93-3	2-Butanone	L		not detected	300	0.62 ug/L	
156-59-4	cis-1,2-Dichloroethene	'		not detected	10	<u>0.17 ug/L</u>	
67-66-3	Chloroform	16.45	90459	2.57 ug/L	6	0.30 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride		 	not detected	.2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether	L		not detected	πle	0.65 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone	L		not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0 <u>.37</u> ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.87 ug/L	
79-00-5	1,1,2-Trichloroethane		i	not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	i	0.32 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane	[not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene			not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes	L		not detected	nle	<u>1.14 ug/L</u>	
1330-20-7	o-Xylene			not detected	nle	0.62_ug/L	
100-42-5	Styrene			not detected	100	0.56_ug/L	
75-25-2	Bromoform	L		not detected	4	0.70 <u>ug/L</u>	
79-34-5	1,1,2,2-Tetrachloroethane	L		not detected	2	0.47 ug/L	[]
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene	}		not detected	600	0.64 ug/L	

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

Qualifiers

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

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

,				1E					
	١	OLATILE (DRGANI	CS AN	NALYSIS DAT	A SHEET		Lab ID.	
		TENTATI	VELY ID	DENTI	FIED COMPC	UNDS		Trip Bla	ink
Lab Name:	FMETL				Project:	971251			
NJDEP#:	13461	Ca	se No.:	5131	Locatio	on: <u>9007</u>	_ St	DG No.:	
Matrix: (soil/v	vater)	WATER	_		La	ab Sample	ID:	5131.01	
Sample wt/vo	ol:	5.0	(g/ml)	ML.	La	ab File ID:		VB005730.D	
Level: (low/r	ned)	LOW			D	ate Receiv	ed:	1/31/00	
% Moisture:	not dec.				D	ate Analyz	ed:	2/4/00	-
GC Column:	RTX5	02. ID: <u>0.</u>	25 (m	nm)	D	ilution Fac	tor:	1.0	
Soil Extract \	/olume:		_ (uL)		S	oil Aliquot	Volu	me:	(uL)
Number TIC:	s found:	0			CONCENTR/ (ug/L or ug/Kg	ATION UNI 9) <u>UG</u> /	TS: ′L		
CAS NO.		COMPOL		ME		RT	ES	T. CONC.	Q

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

Data File	VB005731.D	Sample Name	5131.02
Operator	Skelton	Field 1D	9007-EW
Date Acquired	4 Feb 2000 4:43 pm	Sample Multiplier	1

C \	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	Qualifier
107028	Acrolein			not detected	50	1.85 ug/L	
107131	Acrylonitrile			not detected	50	2.78 ug/L	
75650	tert-Butyl alcohol			not detected	nle	8.52 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.16 ug/L	
108203	Di-isonropyl ether			not detected	nle	0.25 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	1.68 ug/L	
74-87-3	Chloromethane			not detected	30	1.16 ug/L	
75-01-4	Vinyl Chloride			not detected	5	1.06 ug/L	
74-83-9	Bromomethane			not detected	10	1.10 ug/L	
75-00-3	Chloroethane			not detected	nle	1.01 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.50 ug/L	
75-35-4	1 1-Dichloroethene			not detected	2	0.24 ug/L	
67-64-1	Acetone			not detected	700	1.36 ug/L	
75-15-0	Carbon Disulfide			not detected	nle	0.46 ug/L	
75-09-2	Methylene Chloride			not detected	2	0.24 ug/L	
156-60-5	trans-1.2-Dichloroethene			not detected	100	0.16 ug/L	
75-34-3	1 1-Dichloroethane			not detected	70	0.12 ug/L	
108-05-4	Vinvl Acetate			not detected	nle	0.78 ug/L	
78-93-3	2-Butanone			not detected	300	0.62 ug/L	
156-59-4	cis-1.2-Dichloroethene			not detected	10	0.17 ug/L	
67-66-3	Chloroform			not detected	6	0.30 ug/L	
75-55-6	1.1.1-Trichloroethane			not detected	30	0.23 ug/L	
56-23-5	Carbon Tetrachloride		·	not detected	2	0.47 ug/L	
71-43-2	Benzene			not detected	1	0.23 ug/L	
107-06-2	1.2-Dicbloroethane			not detected	2	0.18 ug/L	
79-01-6	Trichloroethene			not detected	1	0.23 ug/L	
78-87-5	1.2-Dichloronronane			not detected	1	0.40 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.55 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.65 ug/L	
10061-01-5	cis-1.3-Dichloropropene			not detected	nle	0.69 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.59 ug/L	
108-88-3	Toluene			not detected	1000	0.37 ug/L	
10061-02-6	trans-1.3-Dichloropropene			not detected	πle	0.87 ug/L	
79-00-5	1.1.2-Trichloroethane			not detected	3	0.48 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.32 ug/L	
591-78-6	2-Hexanone	ĺ	.14	not detected	nle	0.71 ug/L	
126-48-1	Dibromochloromethane			not detected	10	0.86 ug/L	
108-90-7	Chlorobenzene	· · · · ·		not detected	4	0.39 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.65 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	1.14 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.62 ug/L	
100-42-5	Styrene			not detected	100	0.56 ug/L	
75-25-2	Bromoform			not detected	4	0.70 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	2	0.47 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.55 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.57 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.64 ug/L	

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

Qualifiers

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

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

,			1E					
	١	OLATILE C	RGANICS	ANALYSIS DA	TA SHEET		Lab ID.	
		TENTATI	VELY IDEN	TIFIED COMP	OUNDS			
Lab Name:	FMETL			Project	: <u>971251</u>		9007-E	w
NJDEP#:	13461	Cas	se No.: 513	1Loca	tion: <u>9007</u>	SI	DG No.:	
Matrix: (soil/w	vater)	WATER	<u>.</u>		Lab Sample	e ID:	5131.02	
Sample wt/ve	ol:	5.0	(g/ml) <u>ML</u>		Lab File ID:		VB005731.D	
Level: (low/r	ned)	LOW	_		Date Recei	ved:	1/31/00	
% Moisture:	not dec.				Date Analy	zed:	2/4/00	
GC Column:	RTX5	02. ID: 0.2	25 (mm)		Dilution Fac	ctor:	1.0	···
Soil Extract \	/olume:		_ (uL)		Soil Aliquot	t Volu	me:	(uL)
				CONCENT	RATION UN Ka) UG	IITS: A/L		
Number TIC:	s found:	0			<u> </u>			
CAS NO.		COMPOL	JND NAME		RT	ES	ST. CONC.	Q

Client: U.S. Army

DPW, SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703 Lab ID #: 5131.02 Sample Received: 01/31/00 Sample Matrix: Aq

Site: Evans Bldg. 9007

Sample Location: 9007-EW

Method of Extraction:E.P.A SW-846, Method 3015AMethod of Analysis:Std. Methods 18th, Method 3120B, 3112B

Element	Date of	Result	Regulatory	MDL
	Analysis	(ug/L)	Level (ug/L)*	(ug/L)
Aluminum	01/31/00	15700	200	10.0
Antimony	01/31/00	9.00	20	2.0
Arsenic	01/31/00	ND	8	2.0
Barium	01/31/00	40.7	2000	0.5
Beryllium	01/31/00	ND	20	0.5
Cadmium	01/31/00	4.9	4	0.5
Calcium	01/31/00	3850	NLE	20.0
Chromium	01/31/00	22.8	100	0.5
Cobalt	01/31/00	2.5	NLE	0.5
Copper	01/31/00	300	1000	3.0
Iron	01/31/00	7630	300	10.0
Lead	01/31/00	50.0	10	2.0
Magnesium	01/31/00	1320	NLE	20.0
Manganese	01/31/00	51.6	50	0.5
Mercury	01/31/00	0.27	2	0.1
Nickel	01/31/00	11.9	100	0.5
Potassium	01/31/00	2210	NLE	20.0
Selenium	01/31/00	ND	50	3.0
Silver	01/31/00	ND	20	3.0
Sodium	01/31/00	31800	50000	20.0
Thallium	01/31/00	ND	10	3.0
Vanadium	01/31/00	19.0	NLE	1.0
Zinc	01/31/00	52.0	5000	1.0

TAL-METALS RESULTS SUMMARY (ppb)

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established * Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9-6

Client :	U.S. Army	Project # :	5139
	DPW. SELFM-PW-EV	Location :	Bldig.9401 & 9007
	Bldg. 173	UST Reg. # :	5
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	02-Feb-00
Matrix :	Soil	Date Extracted :	03-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	04-Feb-00
Injection Volume	: luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5139.01	9401-B8	1.00	15.12	86.69	179	ND
5139.02	9401-N2	1.00	15.05	93.95	166	ND
5139.03	9401-E2	1.00	15.11	88.57	176	ND
5139.04	9007 9007 -E1	1.00	15.40	83.74	182	1978.76
5139.05	9007999991-N1	1.00	15.13	86.41	180	ND
5139.06	1001 3001 -B.M.H.	1.00	15.06	81.81	191	ND .
						· · · · · · · · · · · · · · · · · · ·
METHOD BLANK	TBLK321	1.00	15.00	100.00	157	ND

ND = Not Detected

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Daniel K. Wright Laboratory Director

Client :	U.S. Army DPW. SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703	Project # : Location : UST Reg. # :	5142 Bidg. 9007
Analysis :	OQA-QAM-025	Date Received :	03-Feb-00
Matrix :	Soil	Date Extracted :	04-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	04-Feb-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5142.01	9007-B3	1.00	15.33	79.07	194	ND
5142.02	9007-B4	1.00	15.22	81.27	190	ND
5142.03	9007-N2	1.00	15.12	83.78	186	ND
5142.04	9007-S3	1.00	15.14	83.11	187	ND
5142.05	9007-S4	1.00	15.35	91.42	167	378.91
5142.06	9007-N3	1.00	15.32	79.92	192	463.35
	·····					
METHOD BLANK	TBLK322	1.00	15.00	100.00	157	ND

ND = Not Detected

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Daniel K. Wright Laboratory Director

,	1A		FIELD IE):
	VOLATILE ORGANICS ANALY	SIS DATA SHEET	-	
Lab Name: FMETL	[NJDEP#: <u>13461</u>		Blank
Project: 971251	Case No.: 5145	Location: 9007	SDG No.:	
Motrive (apil/water)		Lah Sample	—	
Mattix. (Soli/Water)				
Sample wt/vol:	10.0 (g/ml) <u>G</u>	Lab File ID:	<u>VB005767</u>	<u></u>
Level: (low/med)	MED	Date Receiv	ved: 2/4/00	
% Moisture: not dec.	0	Date Analy:	zed: <u>2/8/00</u>	
GC Column: BTX5		Dilution Fac	ctor: 1.0	
		Soil Aliquot	Volume: 50	 (11.)
Soil Extract Volume:	25000 (uL)			(uc)
	CON	CENTRATION UN	ITS:	
			IKG	0
CAS NO.		. or ug/rtg) <u>- o u</u>		ů.
107028	Acrolein		1800	U
107131	Acrylonitrile		1800	U
75650	tert-Butyl alcohol		3200	U
1634044	Methyl-tert-Butyl ether		750	<u> </u>
108203	Di-isopropyl ether		500	U
<u> </u>	Dichlorodifluoromethane	<u> </u>	1000	<u> </u>
74-87-3	Chloromethane		250	
75-01-4	Vinyi Chioride		500	
74-83-9	Chloroethane			U
75-00-3	Trichlorofluoromethane		500	U
75-35-4	1.1-Dichloroethene		250	Ū
67-64-1	Acetone		1700	
75-15-0	Carbon Disulfide		250	<u> </u>
75-09-2	Methylene Chloride		500	U
156-60-5	trans-1,2-Dichloroethene	Э	500	<u> </u>
<u>75-35-3</u>	1,1-Dichloroethane		250	
108-05-4	Vinyl Acetate		1000	
78-93-3	2-Butanone		250	
C7 66 9	CIS-1,2-DIChloroethene	··	250	<u> </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	
110-75-8	2-Chloroethyl vinyl ether	<u>t</u>	500	
<u>10061-01-5</u>	cis-1,3-Dichloropropene		250	
108-10-1	4-Methyl-2-Pentanone		250	
108-88-3	trans-1.3-Dichloroprope			U U
70-00-5	1 1 2-Trichloroethane		500	Ū
127-18-4	Tetrachloroethene		250	U
591-78-6	2-Hexanone		500	U
126-48-1	Dibromochloromethane		500	U
108-90-7	Chlorobenzene		250	
100-41-4	Ethylbenzene		500	

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4	1A			FIELD ID):	
VOL	ATILE ORGANICS A	NALYSIS DATA SH	IEET	Trip	Blank	
Lab Name: <u>FMETL</u>		NJDEP#: <u>13</u>	461			
Project: 971251	Case No.: 5145	Location: 9	9007 S	DG No.: _		
Matrix: (soil/water) <u>SC</u>		Lab Sa	ample ID:	5145.06s		
Sample wt/vol: 10	.0(g/ml) <u>G</u>	Lab Fi	le ID:	VB005767	7.D	
Level: (low/med) ME	D	Date F	Received:	2/4/00		
% Moisture: not dec. 0		Date A	Analyzed:	2/8/00		
GC Column: RTX502.	ID: 0.25 (mm)	Dilutio	n Factor:	1.0		
Soil Extract Volume: 250	00 (uL)	Soil Al	liquot Volu	me: <u>50</u>		(uL)
		CONCENTRATIO	N UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-20-7	m+p-Xvlenes			750	۰U	
1330-20-7	o-Xvlene			500	U	
100-42-5	Styrene			500	U	7
75-25-2	Bromoform			500	U	-
79-34-5	1.1.2.2-Tetrachlor	pethane		500	U	

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	١	/OLATI	LE ORGAN	ICS A	NALYSIS DA	ΤA	SHEET		FIELD ID:	
		TENT	ATIVELY I	DENT	IFIED COMP	οι	INDS			
Lab Name:	FMETL				NJDEP#	¥:	13461			ink
Project:	971251		Case No.:	5145	Locat	ior	n: <u>9007</u> .	_ SI	DG No.:	
Matrix: (soil/	water)	SOIL		•	i	_at	o Sample	lD:	5145.06s	
Sample wt/v	ol:	10.0	(g/ml)	G	1	at	o File ID:		VB005767.D	
Level: (low/r	med)	MED			I	Da	te Receiv	ved:	2/4/00	
% Moisture:	not dec.	0			I	Da	te Analyz	ed:	2/8/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (r	nm)	I	Dili	ution Fac	tor:	1.0	
Soil Extract	Volume:	25000	(uL)		:	So	il Aliquot	Volu	me: <u>50</u>	(uL
						(A1		TS:		
Number TIC	s found:	C)		(ug/L of ug/r	\y) 				
CAS NO.		СОМ		ME			RT	ES	ST. CONC.	Q

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,	1A		FIELD II	D:
V	OLATILE ORGANICS AN	ALYSIS DATA SHEE		
Lab Name: FMETL		NJDEP#: 13461	900	
Project: 971251	Case No.: 5145	Location: 9007	SDG No.:	
Matrix: (soil/water)		Lab Samp	 le ID: 5145.01s	
	10.0 (=(=1) 0	Leb File IF		
Sample wt/vol:				<u>0.U</u>
Level: (low/med)	MED	Date Rece	eived: <u>2/4/00</u>	
% Moisture: not dec.	0	Date Analy	/zed: <u>2/8/00</u>	
GC Column: RTX50	2. ID: 0.25 (mm)	Dilution Fa	actor: 1.0	
Soil Extract Volume:		Soil Alique	t Volume: 50	(uL)
	/			` ' /
	(CONCENTRATION UI	NITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) U(G/KG	Q
			1000	
107028	Acrolein		1800	U
	Acryionitrile		2200	
/5650	Methyl tert Putyl oth		3200	
1634044			<u> </u>	
108203	Di-Isopropyr ettier	hano	1000	
71.07.0			250	
74-87-3	Visul Chlorida		200	
75-01-4	Promonothana		<u> </u>	
74-83-9	Chlaraethane			
75-00-3	Tricklandfurgerereth		<u> </u>	
75-69-4		ane	500	
75-35-4			250	
67-64-1	Acetone		1400	
75-15-0	Carbon Disuifide		250	
/5-09-2			500	
156-60-5	trans-1,2-Dichloroet	nene	500	
75-35-3			250	
108-05-4	VINVI Acetate		700	
78-93-3	2-Butanone		780	1
	cis-1,2-Dichloroethe	ne	250	
<u>67-66-3</u>	Chlorotorm		250	
75-55-6	1,1,1-I richloroethar	10	250	
56-23-5		<u>le</u>	500	
71-43-2	Benzene		250	
107-06-2	<u>1,2-Dichloroethane</u>		500	
79-01-6	l richloroethene		250	
78-87-5	1,2-Dichloropropane	<u>ə</u>	250	U
75-27-4	Bromodichlorometh	ane	250	
110-75-8	2-Chloroethyl vinyl e	ether	500	
10061-01-5	cis-1,3-Dichloroprop	pene	250	U
108-10-1	4-Methyl-2-Pentano	ne	500	
108-88-3			250	
10061-02-6	trans-1,3-Dichloropr	opene	500	
79-00-5	<u>1,1,2-Trichloroethar</u>	10	500	
127-18-4	I etrachloroethene		250	
<u>591-78-6</u>	2-Hexanone		500	<u>U</u>
126-48-1	Dibromochlorometh	ane	500	<u> </u>
108-90-7	Chlorobenzene		250	U
100-41-4	Ethylbenzene		500	U

	,	1A			FIELD II	D:	
	VOL	ATILE ORGANICS AI	NALYSIS DATA	SHEET	900	7-MH	
Lab Name:	FMETL		NJDEP#:	13461			
Project:	971251	Case No.: 5145	Location	: <u>9007</u> 9	SDG No.: _		
Matrix: (soil/w	ater) SC	DIL	Lab	Sample ID	: <u>5145.01s</u>		
Sample wt/vo	l: 10	.0 (g/mi) G	Lab	File ID:	VB00576	8.D	
Levei: (low/m	ned) Mi	ED	Dat	e Received	: 2/4/00		•
% Moisture: n	ot dec. 0		Dat	e Analyzed:	: 2/8/00		
GC Column:		ID: 0.25 (mm)	Dilu	ution Factor:	1.0		
Soil Extract V	olume: 250	000 (uL)	Soi	l Aliquot Vo	lume: 50		(uL)
			CONCENTRAT	ION UNITS	:		
CAS NO	•	COMPOUND	(ug/L or ug/Kg)	UG/KG	à	Q	
1330-2	0-7	m+p-Xvlenes			750	υ	
1330-2	0-7	o-Xvlene			500	U	
100-42	-5	Styrene			500	U	
75-25-2	2	Bromoform			500	U	
79-34-	5	1,1,2,2-Tetrachloro	bethane		500	U	

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VOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID:								
TENTATIVELY IDENTIFIED COMPOUNDS						9007-N	ЛН	
Lab Name:	FMETL			NJDEP#	: 13461			
Project:	971251		Case No.: 5145	Locati	on: <u>9007</u> .	_ SC	DG No.:	
Matrix: (soil/w	vater)	SOIL		L	ab Sample.	ID:	5145.01s	
Sample wt/vo	ol: ·	10.0	(g/ml) <u>G</u>	· Ľ	ab File ID:		VB005768.D	
Level: (low/n	ned)	MED		Γ	Date Receiv	ed:	2/4/00	
% Moisture:	not dec.	0	<u> </u>	Ľ	Date Analyz	ed:	2/8/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	۵	Dilution Fac	tor:	1.0	
Soil Extract \	/olume:	25000	(uL)	Soil Aliquot Volume: 50			(uL)	
	CONCENTRATION UNITS:							
Number TICs	s found:	0		(ug/∟ or ug/K	g) <u>UG</u> /	КG		
CAS NO.		COMF			RT	ES	T. CONC.	Q

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1	EPA SAI	MPLE NO.	
SEM	IVOLATILE ORGANICS ANALYSIS DATA SHEE	<u>ET (</u>	
Lab Name: FMETL	Project: <u>97-1251</u>	9007	7-M.H.
Lab Code: 13461	Case No.: 5145 Location: Bl.900	7 SDG No.:	
		 ID+ E145 02 //	<u></u>
Matrix: (soil/water)	SOIL Lab Sample	ID. <u>5145.02 (</u>	1.10)
Sample wt/vol:	10.04 (g/ml) <u>G</u> Lab File ID:	BN04204.	D
Level: (low/med)	LOW Date Receiv	ed: <u>2/4/00</u>	
% Moisture: 35.78	decanted:(Y/N) N Date Extract	ted: 2/15/00	
Concentrated Extract \	/olume: 1000 (uL) Date Analyz	.ed: 2/18/00	
		tor: 10.0	<u> </u>
Injection Volume: 1.0		10.0	
GPC Cleanup: (Y/N)	<u>N</u> pH:		
	CONCENTRAT		
			0
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
110-86-1	Pyridine	16000	U
62-75-9	N-nitroso-dimethylamine	16000	U
62-53-3	Aniline	16000	U
108-95-2	Phenol	16000	<u> </u>
111-44-4	bis(2-Chloroethyl)ether	16000	U
95-57-8	2-Chlorophenol	16000	U
541-73-1	1,3-Dichlorobenzene	16000	<u> U </u>
106-46-7	1,4-Dichlorobenzene	16000	<u> </u>
100-51-6	Benzyl alcohol	16000	
95-50-1	1,2-Dichlorobenzene	16000	<u> </u>
95-48-7	2-Methylphenol	16000	
108-60-1	bis(2-chloroisopropyi)etner	16000	
106-44-5	4-Metnyiphenoi	16000	
621-64-7		16000	
08-05-3	Nitrobenzene	16000	U
78-59-1	Isophorone	16000	U
88-75-5	2-Nitrophenol	16000	U
105-67-9	2.4-Dimethylphenol	16000	U
111-91-1	bis(2-Chloroethoxy)methane	16000	U
120-83-2	2,4-Dichlorophenol	16000	U
65-85-0	Benzoic Acid	16000	U
120-82-1	1,2,4-Trichlorobenzene	16000	U
91-20-3	Naphthalene	16000	<u> </u>
106-47-8	4-Chloroaniline	16000	
<u>87-68-3</u>	Hexachlorobutadiene	16000	
59-50-7	4-Chloro-3-methylphenol	16000	
91-57-6	2-Methylnaphthalene	16000	
77-47-4		16000	
88-06-2	2,4,5- I richlorophenol	16000	11
95-95-4		16000	
91-58-7	2-Onoronaprimaterie	16000	
101 11 0	Dimethylphthalate	16000	<u> </u>
208-06-8	Acenanhthylene	16000	Ū
606-20-2	2 6-Dinitrotoluene	16000	Ū
99-09-2	3-Nitroaniline	16000	U

	,	1	С		EPA SAN	IPLE NO.	
	SEI	MIVOLATILE ORGAN	ICS ANALYSIS D	DATA SHEET	0007		
Lab Name:	FMETL		Project: 97-1251			9007-M.H.	
Lab Code:	Code: 13461 Case No.: 5145 Location: BI.9007 S				SDG No.:		
Motrix: (coil/	water)	 SOII	L	ab Sample II	D: ¹ 5145.02 (1	:10)	
Matrix. (Som	water)					<u> </u>	
Sample wt/v	oi:	<u>10.04</u> (g/ml) <u>(</u>	<u>ا</u> ال	ad File ID:	BIN04204.	<u> </u>	
Level: (low/	med)	LOW	C	Date Receive	d: <u>2/4/00</u>		
% Moisture:	35.78	8 decanted:(Y/	N) N E	Date Extracte	d: <u>2/15/00</u>		
Concentrate	d Extract	 Volume: 1000 (u	L) [Date Analyze	d: 2/18/00		
		0 (ul.)	_, _	Dilution Facto	r: 10.0		
Injection Vol	ume: I	<u>.0</u> (uL)	L.		1. 10.0		
GPC Cleanu	.ip: (Y/N)	<u> N pH: </u>					
			CON				
.	~		00N			0	
CAS N	υ.	COMPOUND	(ug/L	. or ug/rxg)	Jana	Q	
83.32		Acenaphthene			16000	U	
51-28	<u></u> . 1-5	2.4-Dinitrophen			16000	U	
132-6	34-9	Dibenzofuran			16000	U	
102-0	19-7	4-Nitrophenol			16000	U	
121-1	4-2	2.4-Dinitrotolue	ne		16000	U	
84-66	<u>. </u>	Diethvlphthalat	3		16000	U	
86-73	<u></u>	Fluorene	<u>.</u>		16000	U	
7005	-72-3	4-Chloropheny	-phenylether		16000	U	
100-0	<u>1-6</u>	4-Nitroaniline			16000	U	
534-5	52-1	4.6-Dinitro-2-m	ethylphenol		16000	U	
86-30)-6	n-Nitrosodipher	vlamine		16000	U	
103-3	33-3	Azobenzene			16000	U	
101-5	<u>55-3</u>	4-Bromopheny	-phenylether		16000	U	
118-7	74-1	Hexachloroben	zene		16000	U	
87-86	3-5	Pentachlorophe	nol		16000	<u> </u>	
85-0	-8	Phenanthrene			16000	<u> </u>	
120-1	12-7	Anthracene			16000	U	
84-74	1-2	Di-n-butylphtha	late		3300	JBD	
206-4	44-0	Fluoranthene			16000	U	
92-87	7-5	Benzidine			16000	<u> </u>	
129-0	0-0	Pyrene			1800	JD	
85-68	3-7	Butylbenzylpht	nalate		16000	U	
56-5	5-3	Benzo[a]anthra	cene		16000	U	
91-94	4-1	3,3'-Dichlorobe	nzidine		16000	U	
218-0	01-9	Chrysene			16000	U	
117-	31-7	bis(2-Ethylhexy	1)phthalate		16000	U	
_117-0	84-0	Di-n-octylphtha	late		16000	U	
205-9	99-2	Benzo[b]fluoral	nthene		16000	U	
207-	08-9	Benzo[k]fluorar	thene		16000	U	
50-3	2-8	Benzo[a]pyren	3		16000	<u> </u>	
193-	39-5	Indeno[1,2,3-co	i]pyrene		16000	<u> U</u>	
53-7	0-3	Dibenz[a,h]ant	iracene		16000	U	
101-	191-24-2 Benzola hilbervlene				16000	U U	

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J	SEMIVOL	1F ATILE ORGANICS AI	NALYSIS DA	ATA SHEET	EPA SAMPLE NO.
	TEN	ITATIVELY IDENTIFI	ED COMPO	UNDS	0007-M H
Lab Name:	FMETL		Project:	97-1251	5007-141.11.
Lab Code:	13461	Case No.: 5145	Locatio	n: <u>BI.9007</u> SI	DG No.:
Matrix: (soil/v	vater) <u>SOIL</u>		La	b Sample ID:	5145.02 (1:10)
Sample wt/vo	ol: <u>10.04</u>	1 (g/ml) <u>G</u>	La	ib File ID:	BN04204.D
Level: (low/n	ned) <u>LOW</u>		Da	ate Received:	2/4/00
% Moisture:	35.78	decanted: (Y/N)	<u>N</u> Da	ate Extracted:	2/15/00
Concentrated	Extract Volum	ne: 1000 (uL)	Da	ate Analyzed:	2/18/00
Injection Volu	ume: <u>1.0</u> (uL)	Di	lution Factor:	10.0
GPC Cleanu	p: (Y/N) <u>N</u>	lpH:			

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No.202

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新設計画

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-- CONCENTRATION UNITS:

Number TICs found:	(ug/L or ug/Kg)		UG/KG		
CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
1.	unknown		23.41	7200	JD

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Client :	U.S. Army	Lab. ID # :	5145.02
· .	DPW. SELFM-PW-EV	Date Rec'd:	2/4/00
	Bldg. 173	Extraction Date:	2/16/00
	Ft. Monmouth, NJ 07703	Analysis Date:	2/23/00
Analysis:	SW-846 Method 8081/8082	Location :	97-1251
Matrix:	Soil		Bldg, 9007
Analyst:	T. Frankovich	Field ID:	9007-M.H.(6.5-7'

	Diiution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)
alpha-BHC	1	64.22	0.0005	ND	NLE
beta-BHC	1	64.22	0.0005	ND	NLE
gamma-BHC	1	64.22	0.0006	ND	0.52
delta-BHC	1	64.22	0.0006	ND	NLE
Heptachlor	1	64.22	0.0005	ND	0.15
Aldrin	1	64.22	0.0006	ND	0.04
Heptachlor Epoxide	1	64.22	0.0009	ND	NLE
Endosulfan I	1	64.22	0.0008	ND	NLE
4,4'-DDE	1	64.22	0.0006	ND	2
Dieldrin	1	64.22	0.0008	ND	0.042
Endrin	1	64.22	0.0008	ND	17
Endosulfan II	1	64.22	0.0006	ND	NLE
4,4'-DDD	1	64.22	0.0009	ND	3
Endrin Aldehyde	1	64.22	0.0008	ND	NLE
4,4'-DDT	1	64.22	0.0017	ND	2
Endosulfan-Sulfate	1	64.22	0.0006	ND	NLE
gamma -Chlordane	1	64.22	0.0008	ND	NLE
alpha-Chlordane	1	64.22	0.0008	ND	[·] NLE
Toxaphene	1	64.22	0.0005	ND	0.1
Arochlor 1016	1	64.22	0.0174	ND	0.49
Arochlor 1221	1	64.22	0.0320	ND	0.49
Arochlor 1232	1	64.22	0.0218	ND	0.49
Arochlor 1242	1	64.22	0.0249	ND	0.49
Arochlor 1248	1	64.22	0.0099	ND	0.49
Arochlor 1254	1	64.22	0.0062	2.065	0.49
Arochlor 1260	1	64.22	0.0056	ND	0.49

ND = Not Detected MDL = Method Detection Limit NLE = No Limit Established Column-Primary: RTX-CLPesticide 30m/.32mmID/.25um Column-Confirmation: RTX-CLPesticide2 30m/.32mmID/.25um

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Client: U.S. Army

DPW, SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703 Lab ID #: 5145.02 Sample Received: 02/04/00 Sample Matrix: Solid

Site: Evans Bldg. 9007

Field ID: 9007-M.H.(6.5-7')

Method of Digestion: EPA SW-846 Method 3051A Method of Analysis: EPA SW-846 Method 6010B, 7471B

Element	Date of	Result	Soil Cleanup	MDL
	Analysis	-	Criteria *	
Aluminum	02/09/00	7120	NLE	2.359
Antimony	02/09/00	4.53	14	0.472
Arsenic	02/09/00	6.27	20.	0.472
Barium	02/09/00	44.6	700	0.118
Beryllium	02/09/00	0.217	2	0.118
Cadmium	02/09/00	13.6	39	0.118
Calcium	02/09/00	4770	NLE	4.719
Chromium	02/09/00	41.8	NLE	0.118
Cobalt	02/09/00	3.38	NLE	0.118
Copper	02/09/00	68.9	600	0.708
Iron	02/09/00	10800	NLE	2.359
Lead	02/09/00	168	400	0.472
Magnesium	02/09/00	1400	NLE	4.719
Manganese	02/09/00	140	NLE	0.118
Mercury	02/09/00	0.322	14	0.034
Nickel	02/09/00	16.7	250	0.118
Potassium	02/09/00	693	NLE	4.719
Selenium	02/09/00	1.27	63	0.708
Silver	02/09/00	ND	110	0.708
Sodium	02/09/00	304	NLE	4.719
Thallium	02/09/00	ND	2	0.708
Vanadium	02/09/00	34.0	370	0.236
Zinc	02/09/00	171	1500	0.236

TAL-METALS RESULTS SUMMARY (mg/Kg)

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established * Residential Direct Contact Soil Cleanup as per N.J.A.C. 7:26:D 5/12/99

Client :	U.S. Army	Project # :	5145
	DPW. SELFM-PW-EV	Location :	Bldg. 9007
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	04-Feb-00
Matrix :	Soil	Date Extracted :	07-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	07-Feb-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5145.03	9007-W/N1	5.00	15.14	91.55	170	8615.54
5145.04	9007-W/B1	1.00	15.13	86.19	180	ND
5145.05	9007-W/S1	1.00	15.31	87.51	175	ND
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METHOD BLANK	TBLK323	1.00	15.00	100.00	157	ND

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ND = Not Detected

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Client :	U.S. Army DPW. SELFM-PW-EV Bidg. 173 Ft. Monmouth, NJ 07703	Project # : Location : UST Reg. # :	5154 Bldg.9007
Analysis :	OQA-QAM-025	Date Received :	07-Feb-00 08-Feb-00
Matrix : Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type : Injection Volume :	RTX-5, 0.32mm ID, 30M 1uL	Analysis Complete : Analyst :	09-Feb-00 D. Costagliola

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5154.01	9007-W/W1	1.00	15.07	89.85	174	961.57
5154.02	9007-W/W2	1.00	15.20	87.59	177	1352.06
5154.03	9007-W/W3	1.00	15.79	86.42	172	368.38
5154.04	9007-W/S2	1.00	15.04	84.59	185	275.91
5154.05	9007-CBF1	1.00	15.62	93.18	161	210.75
5154.06	9007-CBF2	1.00	15.04	90.11	173	396.10
5154.07	9007-E/B1	1.00	15.12	91.94	169	7032.19
5154.08	9007-E/N1	5.00	15.58	92.65	163	9740.35
5154.09	9007-E/S1	1.00	15.11	90.26	172	793.13
5154.10	9007-E/E1	1.00	15.24	87.02	177	1590.59
5154.11	9007-E/E2	1.00	15.08	87.15	179	2190.87
5154.12	9007-E/S2	1.00	15.43	89.85	170	231.71
METHOD BLANK	TBLK324	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

	J	1A		FIELD ID:			
VOLATILE ORGANICS ANALYSIS DATA SHEET				IEET	Trip Blank		
Lab Name:	FMETL	NJDEP#: 13461		461			
Project:	Project: 971251 Case No.: 5158 Location				G No.:		
Matrix: (soil/	water)		Lab Sr	ample ID: 5	- 5158.02		
		10.0 (a/ml) G	Lab Fi	Lab File ID:			
Sample wt/vol:						75003734.5	
Level: (low/med)		MED	Date F	Received: 2	2/9/00	<u> </u>	
% Moisture: not dec.		0	Date A	Analyzed: 2	2/9/00		
GC Column	RTX5	02. ID: 0.25 (mm)	Dilutio	n Factor: 1	1.0		
	Volumoi	25000 (ul.)	Soil A	– liquot Volum	ne: 50		611
Soll Extract	volume:	<u>25000</u> (uL)	3011 AI		10. <u>00</u>		(uc)
		C		N UNITS:			
		COMPOLIND (I	μα/Γοτμα/Κα)	UG/KG		Q	
CASIN	0.		ight of ughtery	00,110		~	
10702	28	Acrolein			1800	U	
107131		Acrylonitrile			1800	<u> </u>	
75650		tert-Butyl alcohol			3200	<u> </u>	
1634044		Methyl-tert-Butyl eth			750	<u> </u>	_
108203		Di-isopropyl ether			500		
		Dichlorodifluorometh	ane		1000		_
74-87-3		Chloromethane	Chloromethane		250		_
75-01-4		Vinyl Chloride	Vinyl Chloride				_
74-83-9		Bromomethane	Bromomethane		500		
75-00-3		Chloroethane			750		_
75-69-4		Trichlorofluoromethane			500		_
75-35-4					1200	<u> </u>	
67-64-1		Acetone			250	<u> </u>	\neg
75-15-0		Mathulana Chlorida	Methylene Chloride		500		_
156-60-5		trans-1 2-Dichloroeth	trans-1 2-Dichloroethene		500	ŤŬ	~~~~
75-35-3		1 1-Dichloroethane			250	Ū	-
108-05-4		Vinvl Acetate		1	750	U	-
78-93-3		2-Butanone		İ	900		
10 00	<u> </u>	cis-1.2-Dichloroethe	ne		250	U	
67-66	5-3	Chloroform			250	U	
75-55-6 56-23-5 71-43-2 107-06-2		1,1,1-Trichloroethane			250	U	
		Carbon Tetrachlorid	Carbon Tetrachloride		500	U	
		Benzene			250	<u> </u>	
		1,2-Dichloroethane	1,2-Dichloroethane		500	<u> </u>	
<u>79-0</u>	1-6	Trichloroethene			250	<u> </u>	
78-8	7-5	1,2-Dichloropropane			250	<u> </u>	
75-2	7-4	Bromodichloromethane			250		_
110-	75-8	2-Chloroethyl vinyl e	ther				_
1006	<u>1-01-5</u>	cis-1,3-Dichloropropene			250		_
108-10-1		4-Methyl-2-Pentanol	4-Methyl-2-Pentanone		500		\neg
108-88-3					200		
10061-02-6		trans-1,3-Dichloropr	trans-1,3-Dichloropropene		500		-
79-00-5		1,1,2-I richloroethan	1,1,2-I richloroethane		2500	<u>U</u>	
<u>127-18-4</u> 591-78-6					500		-
		2-Hexanone	2-Hexanone		500		
	<u>48-1</u>		3116		250		
108-	<u>9U-1</u> 41_1	Ethylbenzone			500		
100-41-4				I	000	U	

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	3		1A				FIELD	ID:	
	V	OLATILE O	RGANICS A	NALYSIS DAT	A SHEET	Г	Trij	p Blank	
Lab Name:	FMETL			NJDEP#	13461				
Project:	971251	Cas	e No.: 5158	Locati	on: <u>9007</u>	S	DG No.:	<u>.</u>	
Matrix: (soil/v	vater)	SOIL		L	ab Samp	le ID:	5158.02		
Sample wt/vo	ol:	10.0	(g/ml) G	L	ab File IC):	VB00579	94.D	
Level: (low/r	ned)	MED		D	ate Rece	ived:	2/9/00		
% Moisture:	not dec.	0	-	D	ate Analy	/zed:	2/9/00		
GC Column:	RTX50	2. ID: 0.2	25(mm)	C	ilution Fa	ictor:	1.0		
Soil Extract V	/olume:	25000	(uL)	s	oil Alique	t Volu	ume: <u>50</u>		(uL)
				CONCENTR	ATION UI	VITS:			
CAS NO	Э.	COMPO	DUND	(ug/L or ug/K	g) <u>U(</u>	3/KG		Q	
1330-	20-7	m+p-)	Kvlenes				750	U	
1330-	20-7	o-Xyle	ene				500	U	
100-4	2-5	Styre	10				500	U	
75-25	-2	Brom	oform				500	<u> </u>	
79-34	-5	1,1,2,	2-Tetrachlor	oethane			500	U	

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	١	/OLATI	LE ORGANICS A	NALYSIS DAT	LA SHEET		FIELD ID:	
		TENT	ATIVELY IDENT	IFIED COMPO	DUNDS			
Lab Name:	FMETL			NJDEP#	: 13461			апк
Project:	971251		Case No.: 5158	Locati	on: <u>9007</u> .	S	DG No.:	
Matrix: (soil/	water)	SOIL		Ľ	ab Sample.	e ID:	5158.02	
Sample wt/ve	ol:	10.0	(g/ml) <u>G</u>	L	ab File 1D:		VB005794.D	
Level: (low/r	ned)	MED			Date Recei	ved:	2/9/00	
% Moisture:	not dec.	0		E	Date Analy	zed:	2/9/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	[Dilution Fac	ctor:	1.0	
Soil Extract	/olume:	25000	(uL)	S	Soil Aliquot	Volu	ıme: <u>50</u>	(uL)
				CONCENTR	ATION UN	ITS:		
Number TIC:	s found:	0)	(ug/L or ug/K	g) <u>UG</u>	i/KG	· ·	
CAS NO.		СОМ	POUND NAME		RT	E	ST. CONC.	Q

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· ,	1A		FIELD	D:
V	OLATILE ORGANICS ANALYSIS DATA	SHEET	9007	7-W/CS1
Lab Name: FMETL	NJDEP#:	13461	_	
Project: 971251	Case No.: 5158 Location	1: <u>9007</u> S	DG No.:	
Matrix: (soil/water)	SOIL Lat	o Sample ID:	5158.01	
Sample wt/vol:	11.0 (q/ml) G	n File ID:	VB00579	95.D
		to Dessived:	20000	
Level: (low/med)	MED Da	te Received:	2/9/00	
% Moisture: not dec.	<u>18.06</u> Da	te Analyzed:	2/9/00	
GC Column: RTX50	<u>)2.</u> ID: <u>0.25</u> (mm) Dili	ution Factor:	1.0	
Soil Extract Volume:	25000 (uL) So	il Aliquot Volu	ıme: 50	(uL)
				`` ·
	CONCENTRAT	FION UNITS:		
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG		Q
				<u> </u>
107028	Acrolein		<u>1900</u>	
107131			1900	
75650	Methyl tert Putyl ether		940	
1634044	Di-isopropyl ether		560	
106203	Dichlorodifluoromethane		1100	
74-87-3	Chloromethane		280	U
75-01-4	Vinvl Chloride		840	Ū
74-83-9	Bromomethane		560	U
75-00-3	Chloroethane		840	U
75-69-4	Trichlorofluoromethane		560	<u> </u>
75-35-4	1,1-Dichloroethene		280	U
67-64-1	Acetone		1900	<u> </u>
75-15-0	Carbon Disulfide		280	
75-09-2	Metnylene Unioride		560	
156-60-5	1 1 Diphoroothano		280	······································
108-05-4	Vinvl Acetate		840	
78-93-3	2-Butanone		1100	
10 00 0	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		560	U
71-43-2	Benzene		280	U
107-06-2	1,2-Dichloroethane		560	
79-01-6	Trichloroethene		280	
78-87-5	1,2-Dicnioropropane		280	
110 75 9	2. Chloroothyl vinyl othor		<u></u> 560	
10061-01-5	cis-1 3-Dichloropropene		280	
108-10-1	4-Methyl-2-Pentanone		560	Ŭ
108-88-3	Toluene		280	Ū
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> </u>
108-90-7	Chlorobenzene		280	
100-41-4	Ethylbenzene		560	U U

	FIELD I	D:				
	V	OLATILE ORGANICS A	NALYSIS DATA SHEET	0007		
Lab Name:	FMETL		NJDEP#: 13461	9007	-w/csi	
Project:	971251	Case No.: 5158	Location: 9007	SDG No.:		
Matrix: (soil/	water)	SOIL	Lab Sample ID	: 5158.01		
Sample wt/v	vol:	11.0 (g/ml) <u>G</u>	Lab File ID:	VB00579	5.D	
Level: (low/	med)	MED	Date Received	: 2/9/00		
% Moisture:	not dec.	18.06	Date Analyzed	: 2/9/00		
GC Column	: RTX50	02. ID: 0.25 (mm)	Dilution Factor	: 1.0		
Soil Extract	Volume:	25000 (uL)	Soil Aliquot Vo	lume: 50		(uL)
			CONCENTRATION UNITS	6:		
CAS N	0.	COMPOUND	(ug/L or ug/Kg) UG/KC	3	Q	
1000	20.7	m+n-Xylenes	·	840	<u> </u>	
1330	- <u>20-7</u>	o-Xvlene		560	U	
100-4	12-5	Styrene		560	Ū	
75-29	<u></u> 5-2	Bromoform	· · · · · · · · · · · · · · · · · · ·	560	U	
79-34	4-5	1,1,2,2-Tetrachlor	oethane	560	U	

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	`	VOLATILE OF	IGANICS A	NALYSIS DAT	LA SHEET		FIELD ID:	
		TENTATIV	ELY IDENT	IFIED COMP(DUNDS		0007-W//	CQ1
Lab Name:	FMETL			NJDEP#	: 13461		5007-4470	031
Project:	971251	Case	No.: 5158	Locat	on: <u>9007</u>		G No.:	
Matrix: (soil/	water)	SOIL		L	ab Sample.	iD: <u>{</u>	5158.01	
Sample wt/v	ol:	11.0	(g/ml) <u>G</u>	<u> </u>	ab File ID:	1	VB005795.D	
Level: (low/	med)	MED		E	Date Receiv	/ed: <u>2</u>	2/9/00	
% Moisture:	not dec.	18.06		C	Date Analyz	ed: <u>1</u>	2/9/00	
GC Column:	RTX5	02. ID: 0.25	(mm)	[Dilution Fac	tor:	1.0	
Soil Extract	Volume:	25000	(uL)	5	Soil Aliquot	Volun	ne: <u>50</u>	(uL)
Number TIC	s found:	0		CONCENTR (ug/L or ug/K	ATION UN g) <u>UG</u>	ITS: /KG		
CAS NO.		COMPOUN	ID NAME		RT	ES	T. CONC.	Q

Client :	U.S. Army	Project # :	5158
	DPW. SELFM-PW-EV	Location :	Bldg.9007
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	09-Feb-00
Matrix :	Soil	Date Extracted :	10-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	11-Feb-00
Injection Volume :	luL	Analyst :	D. Costagliola

Sample	Field ID	Dilution - Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5158.01	9007-W/CS1	1.00	15.02	81.94	191	1332.04
5158.03	9007-(M)SP1	1.00	15.01	89.62	175	1657.61
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	·					
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n		1				
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METHOD BLANK	TBLK326	1.00	15.00	100.00	157	ND

ND = Not Detected

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MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

US Army Project # : Client: 5546 DPW SELFM-PW-EV Location : Bldg. 9007 UST Reg. #: Bldg 173 Ft. Monmouth, NJ 07703 OQA-QAM-025 Date Received : Analysis : 19-Jul-00 Matrix : Date Extracted : 21-Jul-00 Soil Inst. ID. : GC TPHC INST. #1 **Extraction Method**: Shake RTX-5, 0.32mm ID, 30M Analysis Complete : 22-Jul-00 Column Type : Injection Volume : 1uL Analyst: **B**.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5546.01	9007(E)-OSP(A)	1.00	15.15	94.67	164	1184.85
5546.02	9007(E)-B3	1.00	15.16	86.97	178	1326.19
5546.03	9007(E)-B4	1.00	15.12	87.96	177	7151.44
5546.04	9007(E)-B2	1.00	15.35	89.63	171	3675.71
5546.05	9007(E)-B(US)	10.00	15.03	91.81	170	16295.04
5546.06	9007(E)-N2	1.00	15.05	88.51	176	1005.33
5546.07	9007(E)-N3	1.00	15.37	90.99	168	623.84
5546.08	9007(E)-W2	1.00	15.18	86.85	178	ND
5546.09	9007(E)-E3	1.00	15.04	89.19	175	ND
5546.10	9007(E)-S3	1.00	15.11	86.86	179	6945.81
METHOD BLANK	TBLK411	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Client:

Analysis : Matrix : Inst. ID. :

Column Type :

Injection Volume:

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

Project # : Location : UST Reg. # :

5610 Bidg 9007

OQA-QAM-025	Date Received :	08-Aug-00
Soil	Date Extracted :	10-Aug-00
GC TPHC INST. #1	Extraction Method :	Shake
RTX-5, 0.32mm ID, 30M	Analysis Complete :	10-Aug-00
luL	Analyst :	Costagliola

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5610.01	9007(E/NE)-B1	1.00	15.96	88.82	78	1578.89
5610.02	9007(E/NE)-N1	1.00	15.80	90.37	77	363.21
5610.03	9007(E/NE)-N2	1.00	15.57	90.50	78	426.34
5610.04	9007(E/NE)-W1	1.00	15.35	89.56	80	603.09
5610.05	9007(E/NE)-S1	1.00	15.23	90.81	80	5391.84
5610.06	9007(E/NE)-E1	5.00	15.28	89.30	81	8684.76
METHOD BLANK	TBLK421	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

,	FIELI	FIELD ID:		
VC	DLATILE ORGANICS ANALYSIS DATA SHE	EET	D1	
Lab Name: FMETL	NJDEP#: <u>134</u>	61	ВІ	
Project: 97-1251	Case No.: 5610 Location: 90	07 SDG No.	:	
Matrix: (soil/water)	SOIL Lab Sar	 mple ID: : 5610.0	1	
Sample wt/vol:			535.U	
Level: (low/med)	MED Date Re	eceived: 8/8/00		
% Moisture: not dec.	11.18 Date Ar	nalyzed: <u>8/11/0</u>	0	
GC Column: RTX502	2. ID: 0.25 (mm) Dilution	Factor: 1.0		
Soil Extract Volume: 2	5000 (ul.) Soil Alia	uot Volume: 50) (uL)	
		<u> </u>	<u> </u>	
	CONCENTRATION	UNITS:		
CAS NO	COMPOUND (ua/L or ua/Ka)	UG/KG	Q	
OAD NO.				
107028	Acrolein	2700	υ	
107131	Acrylonitrile	2700	<u> </u>	
75650	tert-Butyl alcohol	5000	<u> </u>	
1634044	Methyl-tert-Butyl ether	1100	<u> </u>	
108203	Di-isopropyl ether	760	<u> </u>	
	Dichlorodifluoromethane	1500	<u> </u>	
74-87-3	Chloromethane	380		
75-01-4	Vinyl Chloride	1100		
74-83-9	Bromomethane	/60		
75-00-3	Chloroethane	1100		
75-69-4	Trichlorofluoromethane	/60		
75-35-4	1,1-Dichloroethene	380		
67-64-1		760		
75-15-0	Carbon Disulfide	380		
75-09-2	Methylene Chloride	2000		
156-60-5		760		
/5-35-3		1100		
108-05-4		1100		
/8-93-3		380		
07.00.0	Chloroform	380		
		380		
70-00-0	Carbon Tetrachloride	760		
71-43-2	Benzene	380		
107-06-2	1 2-Dichloroethane	760	U U	
79-01-6	Trichloroethene	380	U	
79-01-0	1.2-Dichloropropane	380	U'	
75-27-4	Bromodichloromethane	380	U	
110-75-8	2-Chloroethyl vinyl ether	760	Ū	
10061-01-5	cis-1.3-Dichloropropene	380	Ū	
108-10-1	4-Methyl-2-Pentanone	760	Ū	
108-88-3	Toluene	380	U	
10061-02-6	trans-1,3-Dichloropropene	760	U	
79-00-5	1,1,2-Trichloroethane	760	U	
127-18-4	Tetrachloroethene	380	U	
591-78-6	2-Hexanone	760		
126-48-1	Dibromochloromethane	760		
108-90-7	Chlorobenzene	380	U	
100-41-4	Ethylbenzene		U U	

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	1A			FIELD I	D:	
VOLAT	TILE ORGANICS AN	IALYSIS DATA SHE	ET		54	
Lab Name: FMETL		NJDEP#: 1346	61			
Project: 97-1251	Case No.: 5610	Location: 90	07 SI	DG No.: _		
Matrix: (soil/water) SOIL		Lab San	nple ID:·	5610.01		
Sample wt/vol: 7.4	(g/ml) G	Lab File	ID:	VB00783	5.D	
Level: (low/med) MED)	Date Re	ceived:	8/8/00		
% Moisture: not dec. 11.1	8	Date An	alyzed:	8/11/00		
GC Column: RTX502. II	D: 0.25 (mm)	Dilution	Factor:	1.0		
Soil Extract Volume: 25000	0 (uL.)	Soil Aliq	uot Volu	ime: <u>50</u>		(uL)
			UNITS:			
CAS NO. C	OMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1220.20.7	m+n-Xvlenes			1100	U	
1330-20-7	a Vuleno		1	760		
1330-20-7				760		
100-42-5	Styrene		·	/60	<u> </u>	
75-25-2	Bromoform	· · · · · · · · · · · · · · · · · · ·	<u> </u>	760	U	_
79-34-5	1,1,2,2-Tetrachloroe	ethane		760	U	

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	VOLATILE ORGANICS ANALYSIS DATA SHEET							
	TENTATIVELY IDENT				THED COMPOUNDS			
Lab Name:	FMETL			NJDEP#	: 13461]
Project:	97-125	1	Case No.: <u>561(</u>) Locat	ion: <u>9007</u>	_ SI	DG No.:	
Matrix: (soil/	water)	SOIL	· · · ·	۰L	ab Sample	ID:	5610.01	
Sample wt/v	ol:	7.4	(g/ml) <u>G</u>	, [.] [ab File ID:		VB007835.D	
Level: (low/r	med)	MED		Γ	Date Receiv	/ed:	8/8/00	
% Moisture:	not dec.	11.18		[Date Analyz	ed:	8/11/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	[Dilution Fac	tor:	1.0	
Soil Extract	Volume:	25000	(uL)	C N	Soil Aliquot	Volu	me: <u>50</u>	(uL)
				CONCENTR		ITS:		
Number TIC	s found:	0		(ug/∟ or ug/K	.g) <u>UG</u> ,	/KG		×
CAS NO.		COMF		! 	RT	ES	ST. CONC.	Q

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	,	1A		FIELD IL):
		VOLATILE ORGANICS ANAL	YSIS DATA SHEET		
Lab Name:	FMETL		NJDEP#: <u>13461</u>		
Project:	97-125	1 Case No.: 5610	Location: 9007	SDG No.:	
Matrix: (soil)	(water)		Lab Samol	 e ID:: 5610.02	,
	water)				
Sample wt/	vol:	<u>11.0 (g/ml) G</u>	_ Lab File ID	: <u>VB007836</u>	5.D
Level: (low/	(med)	MED	Date Rece	ived: <u>8/8/00</u>	
% Moisture:	not dec.	9.63	Date Analy	zed: <u>8/11/00</u>	
GC Column	· BTX5	.02. ID: 0.25 (mm)	Dilution Fa	ctor: 1.0	
	Volumot		Soil Aliquo	t Volume: 50	/ul '
Soil Extract	volume:	25000 (UL)			
		CO		NITS:	
	0			S/KG	Q
CASIN	0.				Ğ
1070	28	Acrolein		1800	U
1071	31	Acrylonitrile		1800	<u> </u>
7565	0	tert-Butyl alcohol		3300	<u> U</u>
1634	044	Methyl-tert-Butyl ether		760	<u> </u>
_1082	03	Di-isopropyl ether		500	
		Dichlorodifluoromethan	<u>e</u>	1000	<u> </u>
74-8	<u>7-3</u>	<u> </u>		200	
75-0	<u>1-4</u>	Vinyi Chionde	<u> </u>	<u></u> 500	
74-8	<u>3-9</u>	Chloroothana			11
75-0	0-0 0 4	Trichlorofluoromethane	1	500	Ŭ
75-0	5-4 5-1	1 1-Dichloroethene		250	Ū
67-6	<u></u> 4-1	Acetone	*	500	U
75-1	<u>.</u> 5-0	Carbon Disulfide		250	U
75-0	9-2	Methylene Chloride		850	
156-	60-5	trans-1,2-Dichloroether	1e	500	U
75-3	5-3	1,1-Dichloroethane		250	U
108-	<u>05-4</u>	Vinyl Acetate		760	
78-9	<u>3-3</u>	2-Butanone		760	
		cis-1,2-Dichloroethene		250	U
67-6	<u>6-3</u>	Chloroform		300	
/5-5	<u>5-6</u>				
20-2	<u>3-0</u>			250	<u> </u>
107-	<u>3-2</u> 06-2	1.2-Dichloroethane		500	U
79-0	<u>1-6</u>	Trichloroethene		250	Ū
78-8	7-5	1.2-Dichloropropane		250	U
75-2	7-4	Bromodichloromethan	Э	250	U
110-	75-8	2-Chloroethyl vinyl eth	e1	500	U
1000	31-01-5	cis-1,3-Dichloropropen	e	250	U
108	10-1	4-Methyl-2-Pentanone		500	U
108-	88-3	Toluene		250	
100	<u>51-02-6</u>	trans-1,3-Dichloroprop	ene	500	
79-0	0-5	1,1,2-Trichloroethane		500	
127	<u>18-4</u>			200	
591	<u>-78-6</u>	2-Hexanone	•	500	
126	<u>-48-1</u>	Chlorobenzene	<u> </u>	250	
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VOL/	ATILE ORGANICS A	NALYSIS DATA SHE	ET					
Lab Name: FMETL		NJDEP#: 1346	51 .	_				
Project: 97-1251	Case No.: 5610	Location: 90	07 S	DG No.:				
Matrix: (soil/water) SC		Lab Sam	ple ID:	5610.02				
Sample wt/vol: 11.	.0 (g/ml) <u>G</u>	Lab File	ID:	VB00783	6.D			
Level: (low/med) ME	D	Date Re	ceived:	8/8/00				
% Moisture: not dec. 9.6	3	Date An	alyzed:	8/11/00				
GC Column: RTX502.	ID: 0.25 (mm)	Dilution	Factor:	1.0				
Soil Extract Volume: 250	00 (uL)	Soil Aliq	uot Volu	ime: <u>50</u>		(uL)		
		CONCENTRATION	UNITS:					
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q			
1330-20-7	m+p-Xvlenes		<u> </u>	760	U			
1330-20-7	o-Xvlene			500	U			
100-42-5	Styrene			500	U			
75-25-2	Bromoform			500	U			
79-34-5	1,1,2,2-Tetrachlor	oethane		500	<u> </u>			

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		<u> </u>						
		TENT	ATIVELY IDEN I		JUNDS		N1	
Lab Name:	FMETL		•	NJDEP#	: 13461			
Project:	<u>97-1251</u>		Case No.: 5610	Locati	on: <u>9007</u>	_ SI	DG No.:	
Matrix: (soil/v	vater)	SOIL		· L	ab Sample	ID:	5610.02	
Sample wt/vc	bİ:	11.0	(g/ml) <u>G</u>	L	ab File ID:	•	VB007836.D	
Levei: (low/n	ned)	MED		0	ate Receiv	ved:	8/8/00	
% Moisture:	not dec.	9.63		C	Date Analyz	zed:	8/11/00	
GC Column:	RTX50	02. ID:	<u>0.25</u> (mm)	[ilution Fac	tor:	1.0	
Soil Extract \	/olume:	25000	(uL)	. 8	Soil Aliquot	Volu	me: <u>50</u>	(uL)
				CONCENTR	ATION UN	ITS:		
Number TICs	s found:	0	l	(ug/L or ug/K	g) <u>UG</u>	/KG		
CAS NO.		COM	POUND NAME		RT	E	ST. CONC.	Q

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	1A		FIELD ID	:
, VOL	ATILE ORGANICS ANALYSI	S DATA SHEET]
Lab Name: FMETL	. N.	JDEP#: 13461	1	12
Project: 97-1251	Case No : 5610	Location: 9007		
Flojeci. <u>37-1201</u>		Leb Comple (D	- 5610.02	
Matrix: (soil/water) SC		Lab Sample ID	. 0010.00	
Sample wt/vol: <u>12</u>	<u>3 (g/ml) G</u>	Lab File ID:	VB007837	<u>.D</u>
Level: (low/med) ME	D	Date Received	: 8/8/00	
% Moisture: not dec. 9.5	· · · · · · · · · · · · · · · · · · ·	Date Analyzed	: 8/11/00	
GC Column: RTX502.	ID: 0.25 (mm)	Dilution Factor:	: 1.0	
Roil Extract Volume: 250	00 (ul.)	Soil Aliquot Vo	lume: 50	(uL)
Soli Extract volume. 200		00		(/
	CONC	ENTRATION UNITS	.	
CASNO	COMPOUND (un/L c	or ug/Kg) UG/KG	à	Q
		<u></u>		
107028	Acrolein		1600	U
107131	Acrylonitrile		1600	U
75650	tert-Butyl alcohol		2900	<u> </u>
1634044	Methyl-tert-Butyl ether		680	<u> </u>
108203	Di-isopropyl ether		450	
	Dichlorodifluoromethane		900	
74-87-3	Chloromethane		230	
75-01-4	Vinyl Chloride		680	
74-83-9	Bromomethane		450	
75-00-3	Chloroethane		680	
75-69-4	Trichlorofluoromethane		450	
75-35-4	1,1-Dichloroethene		230	
67-64-1	Acetone		450	
75-15-0	Carbon Disultide		230	0
75-09-2	Methylene Chloride		300	
156-60-5	trans-1,2-Dichloroethene		400	
75-35-3	1,1-Dichloroethane		<u>230</u> 680	
108-05-4	Vinyi Acetate		680	
78-93-3	2-Butanone		230	
07.66.9	Cls-1,2-Dichloroethene		250	
75 55 6			230	U
75-55-6	Carbon Tetrachloride		450	U
71.43-2	Benzene		230	U
107-06-2	1 2-Dichloroethane		450	U
79-01-6			230	U
78-87-5	1 2-Dichloropropane		230	U
75-27-4	Bromodichloromethane		230	U
110-75-8	2-Chloroethyl vinyl ether	······	450	U
10061-01-5	cis-1.3-Dichloropropene		230	U
108-10-1	4-Methyl-2-Pentanone		450	U
108-88-3	Toluene		230	U
10061-02-6	trans-1,3-Dichloropropen	9	450	
79-00-5	1,1,2-Trichloroethane		450	U
127-18-4	Tetrachloroethene		230	U
591-78-6	2-Hexanone		450	
126-48-1	Dibromochloromethane		450	
108-90-7	Chlorobenzene		230	
100-41-4	Ethylbenzene		450	

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,		FIELD ID	D:		
VOLAT	TILE ORGANICS ANAL	_YSIS DATA SHEET			
Lab Name: FMETL			Г	N2	
Project: 97-1251	Case No.: <u>5610</u>	Location: 9007	SDG No.: _		_
Matrix: (soil/water) SOIL		Lab Sample ID	: <u>5610.03</u>		_
Sample wt/vol: 12.3	(g/ml) G	Lab File ID:	VB007837	7.D	
Level: (low/med) MED)	Date Received	8/8/00		
% Moisture: not dec. 9.5		Date Analyzed	8/11/00		
GC Column: RTX502. II	 D: 0.25 (mm)	Dilution Factor	1.0		
Soil Extract Volume: 25000	0(uL)	Soil Aliquot Vo	ume: <u>50</u>	(uL)
	CC	ONCENTRATION UNITS	:		
CAS NO. C	COMPOUND (ug	g/L or ug/Kg) UG/KG	ì	Q	
1330-20-7	m+n-Xvlenes		680	U]
1330-20-7	o-Xvlene		450	U]
100-42-5	Styrene		450	U]
75-25-2	Bromoform		450	U	
79-34-5	1,1,2,2-Tetrachloroeth	nane	450	U	

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	,	VOLATI	LE ORGANICS A	NALYSIS DA	FA SHEET		FIELD ID:	
TENTATIVELY IDENTIFIED COMPOUNDS							NO	
Lab Name:	FMETL			NJDEP#	: 13461		INZ	
Project:	<u>97-125</u>	1	Case No.: 5610	Locat	on: <u>9007.</u>	SI	DG No.:	
Matrix: (soil/	water)	SOIL		L	ab Sample.	ə ID:	5610.03	
Sample wt/v	ol:	12.3	(g/ml) <u>G</u>	L	ab File ID:		VB007837.D	
Level: (low/r	med)	MED		[Date Recei	ved:	8/8/00	
% Moisture:	not dec.	9.5		t	Date Analy:	zed:	8/11/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	ſ	Dilution Fac	ctor:	1.0	
Soil Extract	Volume:	25000	(uL)		Soil Aliquot	: Volu	me: <u>50</u>	(uL)
						IITS:		
Number TIC	s found:	()		.g, <u>oc</u>		<u></u>	
CAS NO.		СОМ	POUND NAME		RT	ES	T. CONC.	Q

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	1	1A			FIELD I	כ:
	١	OLATILE ORGANICS ANAL	_YSIS DATA SH	EET	·,	
Lab Name:	FMETL	······	_ NJDEP#: <u>13</u>	461	ر 	····
Project:	97-125	Case No.: 5610	Location: 9	007SD0	3 No.:	
Matrix: (soil/	/water)	SOIL	 Lab Sa	mple ID: 5		
Comple ut/u	in literation of the second se	11.0 (a/ml) G	Lab Eil		007020	
Sample w/v	/01:				6007638	<u>3.D</u>
Level: (low/	med)	MED	Date R	leceived: 8	/8/00	
% Moisture:	not dec.	10.44	Date A	nalyzed: 8	/11/00	
GC Column	: RTX5	02. ID: 0.25 (mm)	Dilution	n Factor: 1	.0	
Soil Extract	Volume:	25000 (11)	Soil Ali	— iauot Volum		(1)
SOII EXILACI	volume.	<u>25000</u> (uL)	SUI AI	iquot volum	a. <u>50</u>	(u
		CC				
	<u> </u>					0
CAS IN	0.		are of ug/Ng)	JUNING		Q
10702	28	Acrolein			1600	U
10713	31	Acrylonitrile			1600	
75650		tert-Butyl alcohol	· · · · · · · · · · · · · · · · · · ·		<u>3000 </u>	U
16340	<u>)44</u>	Methyl-tert-Butyl ether			700	<u> </u>
10820	<u> </u>	Di-isopropyl ether			470	<u> U </u>
74.07		Dichlorodifluoromethar	10		940	
74-87	-3	Vinul Chlorida			230	<u> </u>
74-83	<u>-4</u>	Bromomethane			470	<u> </u>
75-00)-3	Chloroethane	- <u></u>		700	
75-69)-4	Trichlorofluoromethan			470	U
75-35	j-4	1,1-Dichloroethene	· · · · · · · · · · · · · · · · · · ·		230	Ū
67-64	-1_	Acetone			470	U
75-15	<u>j-0</u>	Carbon Disulfide			230	<u> </u>
75-09)-2	Methylene Chloride	<u></u>		440	<u>J</u>
156-6	<u>30-5</u>	trans-1,2-Dichloroethe	ne		470	<u> </u>
75-35	<u>)-3</u>	<u>1,1-Dichloroethane</u>		<u></u>	230	<u> </u>
108-0	<u>15-4</u>	2 Rutanono		<u> </u>	700	<u> </u>
10-93	<u></u>	cis-1 2-Dichloroothene			230	
67-66	<u></u>	Chloroform	·		300	
75-55	<u></u> 5-6	1.1.1-Trichloroethane			230	<u> </u>
56-23	3-5	Carbon Tetrachloride	· · · · · · · · · · · · · · · · · · ·		470	U
71-43	3-2	Benzene			230	U
107-0) <u>6-2</u>	1,2-Dichloroethane			470	<u> </u>
79-01	-6	Trichloroethene			_230 _	<u> </u>
78-87	<u>'-5</u>	<u>1,2-Dichloropropane</u>	- <u> </u>		230	<u> </u>
75-27	<u>'-4</u>	Bromodichloromethan	e		230	<u> </u>
1006	<u>5-8</u>	2-Chioroethyl Vinyl eth	<u>ei</u>		470	
1000	1-01-5 10-1	4-Methyl-2-Pentanone			470	
108-8	<u>.0-1</u> 18-3				230	
1006	1-02-6	trans-1.3-Dichloroprop	ene		470	U U
79-00)-5_	1,1,2-Trichloroethane	- <u></u>		470	Ū
127-1	8-4	Tetrachloroethene			230	<u> </u>
591-7	'8- 6	2-Hexanone			470	U
126-4	8-1	Dibromochloromethan	e		470	<u> U </u>
108-9	10-7	Chlorobenzene			230	<u> </u>
100-4	1-4	Ethylbenzene	·		470	U

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,	1A		FIELD IC):					
	VOLATILE ORGANICS ANALYSIS DATA SHEET								
Lab Name: FMETI		NJDEP#: 13461							
Project: 97-125	61 Case No.: 5610	Location: 9007	SDG No.:						
Matrix: (soil/water)	SOIL	Lab Sample I	D: <u>5610.04</u>						
Sample wt/vol:	11.9 (g/ml) <u>G</u>	Lab File ID:	VB007838	3.D					
Level: (low/med)	MED	Date Receive	d: <u>8/8/00</u>						
% Moisture: not dec.	10.44	Date Analyze	d: <u>8/11/00</u>						
GC Column: RTX	502. ID: 0.25 (mm)	Dilution Facto	or: 1.0						
Soil Extract Volume:		Soil Aliquot V	olume: <u>50</u>		(uL)				
		CONCENTRATION UNIT	S:						
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/K	G	Q					
1330-20-7	m+p-Xvlenes		700	U					
1330-20-7	o-Xvlene	·	470	U					
100-42-5	Styrene		470	U					
75-25-2	Bromoform		470	U					
79-34-5	1,1,2,2-Tetrachlor	oethane	470	U					

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	V	OLATILI	E ORGANICS A	NALYSIS DAT	TA SHEET	FIELD	ID:	
		TENTA	TIVELY IDENT	IFIED COMPO	DUNDS		W/1	
Lab Name:	FMETL			NJDEP#	: 13461		¥¥ I	
Project:	<u>97-1251</u>	(Case No.: <u>5610</u>	Locati	on: <u>9007</u>	SDG No.:		
Matrix: (soil/	water)	SOIL		· · L	ab Sample	ID: <u>5610.04</u>		
Sample wt/vo	ol:	11.9	(g/ml) <u>Ġ</u>	L	ab File ID:	VB0078	38.D	_
Level: (low/r	ned)	MED		Ε	Date Receiv	/ed: <u>8/8/00</u>		-
% Moisture:	not dec.	10.44	¹¹	C	Date Analyz	ed: <u>8/11/00</u>		-
GC Column:	RTX5	02. ID:	0.25 (mm)	[Dilution Fac	tor: <u>1.0</u>		_
Soil Extract	Volume:	25000	(uL)	S	Soil Aliquot	Volume: 50		_ (uL)
				CONCENTR		ITS:		
Number TIC	s found:	0		(ug/L or ug/K	g) <u>UG</u> ,	/KG		
CAS NO.		COMP	OUND NAME		RT	EST. CON	с.	Q

1	1A		FIELD ID):	
	VOLATILE ORGANICS ANALYSIS DATA S	HEET		24	
Lab Name: FMET	L NJDEP#: <u>1</u>	3461			
Project: 97-12	51 Case No.: 5610 Location:	9007 SD	G No.:		
Matrix: (soil/water)		Sample ID: 5			
			/B007839		
Sample wt/vol:			10001000		
Level: (low/med)	MED Date	Heceived: 8	5/8/00	·····	
% Moisture: not dec	. <u>9.19</u> Date	Analyzed: 8	3/11/00		
GC Column: RTX	502. ID: 0.25 (mm) Diluti	on Factor: 1	.0		
Soil Extract Volume	Soil Extract Volume: 25000 (uL) Soil Aliquot				
		·			
	CONCENTRATIO	ON UNITS:			
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG		Q	
			1600	11	
107028	Acrolein		1600		
75650	tert-Butyl alcohol		3000	<u> </u>	
1624044	Methyl-tert-Butyl ether		690	U	
108203	Di-isopropyl ether		460	Ŭ	
100200	Dichlorodifluoromethane		920	U	
74-87-3	Chloromethane		230	U	
75-01-4	Vinvl Chloride		690	U	
74-83-9	Bromomethane		460	U	
75-00-3	Chloroethane		690	U	
75-69-4	Trichlorofluoromethane		460	<u> </u>	
75-35-4	1,1-Dichloroethene		230	U	
67-64-1	Acetone		460	U	
75-15-0	Carbon Disulfide		230	<u> </u>	
75-09-2	Methylene Chloride		380	J	
156-60-5	trans-1,2-Dichloroethene		460	<u> </u>	
<u>_75-35-3</u>	<u>1,1-Dichloroethane</u>		230	<u>U</u>	
108-05-4	Viny Acetate		690		
<u>78-93-3</u>	2-Butanone		090		
07.00.0	<u>Cis-1,2-Dichloroethene</u>		230		
67-66-3			230		
75-55-0	Carbon Tetrachloride		460	<u> </u>	
71-43-2	Benzene		230	U	
107-06-2	1 2-Dichloroethane		460	U	
79-01-6	Trichloroethene		230	U	
78-87-5	1.2-Dichloropropane		230	U	
75-27-4	Bromodichloromethane		230	U	
110-75-8	2-Chloroethyl vinyl ether		460	U	
10061-01-5	cis-1,3-Dichloropropene		230	U	
108-10-1	4-Methyl-2-Pentanone		460	<u> </u>	
108-88-3	Toluene		230	U	
10061-02-6	trans-1,3-Dichloropropene		460		
79-00-5	1,1,2-Trichloroethane		460		
127-18-4	Tetrachloroethene		230		
591-78-6	2-Hexanone		460		
126-48-1	Dibromochloromethane		400		
108-90-7	Chlorobenzene		230		
100-41-4	Ethylbenzene		400		

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,	1A		FIELD II	D:	
VOLA	ATILE ORGANICS AN	IALYSIS DATA SHEE	т	<u></u>	
Lab Name: FMETL		NJDEP#: _13461		<u> </u>	
Project: 97-1251	Case No.: 5610	Location: 900	7 SDG No.:		
Matrix: (soil/water) SO	IL	Lab Samp	ole ID: <u>5610.05</u>		
Sample wt/vol: 11.	9 (g/mi) <u>G</u>	Lab File II	D: <u>VB00783</u>	9.D	
Level: (low/med) ME	D	Date Rec	eived: <u>8/8/00</u>	•	
% Moisture: not dec. 9.1	9	Date Anal	iyzed: <u>8/11/00</u>		
GC Column: RTX502.	ID: 0.25 (mm)	Dilution F	actor: 1.0		
Soil Extract Volume: 250	00 (uL)	Soil Aliqu	ot Volume: 50	((uL)
		CONCENTRATION U	NITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>U</u>	IG/KG	Q	
1000 00 7	m : n-Yvlenes		690		٦
1330-20-7			460	U U	1
100-42-5	Styrene		460	Ū	1
75-25-2	Bromoform		460	U	1
79-34-5	1,1,2,2-Tetrachloro	ethane	460	U	

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Lab Namo		TENTATI	VELY IDENT		DUNI • 1:	DS 3461		5	S1	
Lab Name.					• <u></u>	0007	<u> </u>			
Project:	97-1251		30 NO.: 00 N	LUCA	юп.	9007	- 31	/G NO		
Matrix: (soil/v	vater)	SOIL	_	· I	.ab S	Sample I	D:	5610.05		
Sample wt/vo	ol:	11.9	(g/ml) <u>G</u>	. I	.ab F	ile ID:		VB007839	9.D	-
Level: (low/r	ned)	MED	_	1	Date	Receive	ed:	8/8/00		-
% Moisture:	not dec.	9.19		l	Date	Analyze	ed:	8/11/00		-
GC Column:	RTX5	02. ID: 0.2	2 <u>5</u> (mm)]	Diluti	on Facto	or:	1.0		-
Soil Extract V	/olume:	25000	_ (uL)	:	Soil A	Aliquot V	/olui	me: <u>50</u>		_ (uL)
					ATIC		rs:			
Number TIC	s found:	0			.y)		1.0			
CAS NO.		COMPOL	JND NAME			RT	ES	T. CONC.		Q

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	,	1A			FIELD I		
	١	VOLATILE ORGANICS AN	IALYSIS DATA SI	HEET		E1	
Lab Name:	FMETL		NJDEP#: _1:	3461			
Project:	<u>9</u> 7-1251	1 Case No.: 5610	Location:	90 <u>07</u> SI	DG No.:		
Matrix: (soil/	water)	SOIL	Lab S	ample ID:	5610.06		
Sample wt/v	voi:	11.4 (g/ml) G	Lab F	ile ID:	VB00784	.0.D	
Level: (low/	med)	MED	Date	Received:	8/8/00		
% Moisture:	not dec.	10.7	Date	Analyzed:	8/11/00		
GC Column	RTX5	<u>02.</u> ID: <u>0.25</u> (mm)	Dilutio	on Factor:	1.0		
Soil Extract	Volume:	<u>25000</u> (uL)	Soil A	liquot Volu	me: <u>50</u>		(uL)
						_	
			CONCENTRATIC	IN UNITS:		_	
CAS N	0.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
10702	28	Acrolein			1700	U	\square
10713	31	Acrylonitrile			1700	<u> </u>	
75650	<u>) </u>	tert-Butyl alcohol				U	_
16340)44	Methyl-tert-Butyl eth	101				_
10820	03	Di-isopropyl ether			<u> 490 </u>	<u> </u>	_
		Dichlorodifluoromet	hane	<u>. </u>	<u>980</u>		
74-87	<u>3</u>	<u>Chloromethane</u>			250		
75-01	-4	Vinyl Chloride					_
74-83	<u>-9</u>	Bromomethane			490		{
75-00	1-3	<u>Unioroetnane</u>					_
75-65	-4		ane		490		_{
) <u>-4</u>				<u>200</u>		
75-15	<u>.</u>	Carbon Disulfida		<u> </u>	250		_
75-00	1-2	Methylene Chloride			370		
156-6	<u>50-5</u>	trans-1 2-Dichloroet	 hene		490		
75-35	i-3	1 1-Dichloroethane			250	U U	
108-0)5-4	Vinvl Acetate	,,,		740	U U	
78-93	3-3	2-Butanone			740	Ū	
		cis-1.2-Dichloroethe	ene		250	Ū	-
67-66	5-3	Chloroform			340		
75-55	5-6	1,1,1-Trichloroethar	ne		250	U	
56-23	3-5	Carbon Tetrachloric	le		490	U	
71-43	3-2	Benzene			250	υ	
107-0)6-2	1,2-Dichloroethane			490	U	
<u>79-01</u>	-6	Trichloroethene			250	U	
78-87	<u>'-5</u>	1,2-Dichloropropane	<u>. </u>		250	<u> </u>	
<u>75-27</u>		Bromodichlorometh	ane		250	<u> </u>	
110-7	<u>'5-8</u>	2-Chloroethyl vinyl	ether		490	U	
1006	<u>1-01-5</u>	cis-1,3-Dichloropror	pene		250		
108-1	<u>U-1</u>	4-Methyl-2-Pentanc	ne		490		_
108-8	<u>100.0</u>				250		_
	<u>1-02-6</u>	trans-1,3-Dicnioropi	ropene		490		\neg
		Tetraphlereethere	IE		<u>490</u>		_
<u>12/-1</u>	79 6				200		_
591-/	0-0		200		490		\neg
109.0	10*1	Chlorobonzona	ane		<u>490</u> 250		
100-5	11- <i>1</i>	Ethylbenzone			<u>200</u>		
<u> </u>	<u>+ 1 - 4</u>			L	_ +30	<u> </u>	J

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4	1A			FIELD I	D:	
VOLA	ATILE ORGANICS A	NALYSIS DATA SH	EET		 E1	
Lab Name: FMETL	· · · · · · · · · · · · · · · · · · ·	NJDEP#: 134	461	_		
Project: 97-1251	Case No.: 5610	Location: 9	007 SI	DG No.: _		
Matrix: (soil/water) SO	IL	Lab Sa	ample ID:	5610.06		
Sample wt/vol: 11.	4 (g/mi) <u>G</u>	Lab Fil	e ID:	VB007840	D.D	
Level: (low/med) ME	D	Date R	Received:	8/8/00		
% Moisture: not dec. 10.	7	Date A	nalyzed:	8/11/00		
GC Column: RTX502.	1D: 0.25 (mm)	Dilution	n Factor:	1.0		
Soil Extract Volume: 250	00 (uL)	Soil Ali	iquot Volu	me: <u>50</u>		(uL)
		CONCENTRATION	N UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1000.00.7	m+n-Xylenes			740	U	
1330-20-7	o-Xviene			490	Ū	
100-42-5	Styrene			490	U	
75-25-2	Bromoform			490	U	
79-34-5	1,1,2,2-Tetrachlor	pethane		490	U	

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	\ \	OLATIL	E ORGANICS A	NALYSIS DA	LA SHEET		FIELD ID:	
		TENT	ATIVELY IDENT	IFIED COMPO	DUNDS		51	
Lab Name:	FMETL			NJDEP#	: 13461		E	
Project:	<u>9</u> 7-1251		Case No.: 5610	Locati	ion: <u>9007</u>	_ SE	DG No.:	·
Matrix: (soil/v	vater)	SOIL		L	ab Sample.	ID:	5610.06	
Sample wt/vo	ol:	11.4	(g/ml) <u>G</u>	L	ab File ID:		VB007840.D	
Level: (low/n	ned)	MED		[Date Receiv	ved:	8/8/00	
% Moisture:	not dec.	10.7		Γ	Date Analyz	ed:	8/11/00	
GC Column:	RTX5	<u>)2.</u> ID:	<u>0.25</u> (mm)	Γ	Dilution Fac	tor:	1.0	······
Soil Extract \	/olume:	25000	(uL)	S	Soil Aliquot	Volur	me: <u>50</u>	(uL)
				CONCENTR		ITS:		
Number TIC:	s found:	0		US/L OF US/N	.g) <u></u>			
CAS NO.		COMP	OUND NAME		RT	ES	T. CONC.	Q

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	1	1A			FIELD IC):
	١	OLATILE ORGANICS A	NALYSIS DATA SH	IEET	Trip	Blank
Lab Name:	FMETL		NJDEP#: <u>13</u>	461		
Project:	97-1251	1 Case No.: 5610	Location: 9	007 SD	G No.: _	
Matrix: (soil/	water)	SOIL	Lab Sa	ample ID: 5		
Comple with		10.0 (a/mi) G	Lah Fi	- ۱ <u>۵۰</u> ۰	/B00783/	4 D
Sample w/v	01.	<u>10.0</u> (g/m) <u>u</u>			1000100-	<u></u>
Level: (low/	med)	MED	Date F	leceived: {	3/8/00	
% Moisture:	not dec.	0	Date A	Analyzed: 8	3/11/00	
GC Column	: RTX5	02. ID: 0.25 (mm)	Dilutio	n Factor:	1.0	
Soil Extract	Volume:	25000 (ul.)	Soil A	- liquot Volun	ne: 50	 (uL)
SUII EXITACI	volume.	<u>23000</u> (uL)	00			、
			CONCENTRATIO	N UNITS:		
	0	COMPOUND	(ua/L or ua/Ka)	UG/KG		Q
UAG N	0.		(19/2 0: 19/1.9/			
1070	28	Acrolein			1800	U
1071	31	Acrylonitrile			1800	U
7565	0	tert-Butyl alcohol			3200	U
1634	044	Methyl-tert-Butyl e	ther	·	750	
1082	<u>03</u>	Di-isopropyl ether			500	U
		Dichlorodifluorome	ethane		1000	
74-87	/-3	Chloromethane			250	
75-0	1-4	Vinyl Chloride			<u></u>	
74-8	<u>3-9</u>	Bromometnane			<u> </u>	
75-00	<u>)-3</u>				500	
<u>/5-6</u>	<u>J-4</u>	<u> </u>		·	250	
75-3	<u>)-4</u> / 1		<u> </u>		500	U U
75-1	<u>+- 1</u> 5-0	Carbon Disulfide			250	Ū
75-0	<u>-2</u>	Methylene Chlorid	 le		34000	
156-	<u></u> 60-5	trans-1.2-Dichloro	ethene		500	U
75-3	<u>5-3</u>	1.1-Dichloroethan	е		250	U
108-	<u></u> 05-4	Vinyl Acetate			750	U
78-9	3-3	2-Butanone			750	U
		cis-1,2-Dichloroet	hene	· ·	250	U
67-6	6-3	Chloroform	81 - L		250	U
75-5	5 - 6	1,1,1-Trichloroeth	ane		250	
56-2	<u>3-5</u>	Carbon Tetrachlor	ride		<u> </u>	
71-4	<u>3-2</u>	Benzene			250	
107-	06-2	1,2-Dichloroethan	e		<u> </u>	
<u>79-0</u>	<u>1-6</u>				250	
78-8	7.4		thano		250	
75-2	<u>7-4</u> 75.0	2 Chloroothyl vin	d other		500	
100	<u>/0-0</u> :1.01-5	cis-1 3-Dichloropr			250	U
108	<u>10-1</u>	4-Methyl-2-Pentar	none		500	U U
108-	88-3	Toluene			250	U
1006	<u>55 5</u> 51-02-6	trans-1.3-Dichlorc	propene		500	U
79-0	0-5	1,1,2-Trichloroeth	ane _		500	U
127-	18-4	Tetrachioroethene	Э		250	U
591-	78-6	2-Hexanone			500	U
126-	48-1	Dibromochlorome	thane		500	U
108-	90-7	Chlorobenzene			250	
100-	41-4	Ethylbenzene			500	<u> </u>

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	,		1A				FIELD I	iD:	
Lab Name:	V FMETL	OLATILE C	RGANICS /	ANALYSIS DAT	A SHEET 13461		Trip	Blank	
Project:	97-1251	Ca	se No.: <u>561</u>	0 Locatio	on: 9007	SD	G No.:		
Matrix: (soil/v	water)	SOIL	_	La	b Sample	ID: <u></u>	5610.07		
Sample wt/vo	ol:	10.0	(g/ml) <u>G</u>	La	ab File ID:	7	VB00783	84.D	
Level: (low/n	ned)	MED	_	Da	ate Receive	ed: 8	3/8/00		
% Moisture:	not dec.	0		Da	ate Analyze	ed: [<u>B/11/00</u>		
GC Column:	RTX50	<u>2.</u> ID: <u>0.</u>	25 (mm)	Di	lution Fact	or: _	1.0		
Soil Extract \	/olume:	25000	_ (uL)	So	oil Aliquot \	/olun	ne: <u>50</u>		(uL)
				CONCENTRA		rs:			
CAS NO).	COMPO	DUND	(ug/L or ug/Kg) <u>UG/</u> I	KG		Q	
1330-2	20-7	m+p-2	Xylenes				750	U	
1330-2	20-7	o-Xyle	ene				500	Ų	
100-42	2-5	Styre	ne				500	U	
75-25-	-2	Brom	oform				500	U	
79-34-	5	1,1,2,	2-Tetrachlor	roethane			500	U	
	Lab Name: Project: Matrix: (soil/v Sample wt/vo Level: (low/r % Moisture: GC Column: GC Column: Soil Extract v CAS NO 1330-2 100-42 75-25 79-34	V Lab Name: <u>FMETL</u> Project: <u>97-1251</u> Matrix: (soil/water) Sample wt/vol: Level: (low/med) % Moisture: not dec. GC Column: <u>RTX50</u> Soil Extract Volume: CAS NO. <u>1330-20-7</u> <u>1330-20-7</u> <u>1330-20-7</u> <u>1330-20-7</u> <u>1330-20-7</u> <u>100-42-5</u> <u>75-25-2</u> <u>79-34-5</u>	VOLATILE C Lab Name: FMETL Project: 97-1251 Cas Matrix: (soil/water) SOIL Sample wt/vol: 10.0 Level: (low/med) MED % Moisture: not dec. 0 GC Column: RTX502. ID: 0.2 Soil Extract Volume: 25000 CAS NO. COMPO 1330-20-7 m+p-2 1330-20-7 o-Xylic 100-42-5 Styrei 75-25-2 Brom. 79-34-5 1,1,2,	1A VOLATILE ORGANICS Lab Name: FMETL Project: 97-1251 Case No.: 561 Matrix: (soil/water) SOIL Sample wt/vol: 10.0 (g/ml) G Level: (low/med) MED % Moisture: not dec. 0 GC Column: RTX502. ID: 0.25 GC Column: RTX502. ID: 0.25 Soil Extract Volume: 25000 (uL) CAS NO. COMPOUND 1330-20-7 m+p-Xylenes 1330-20-7 o-Xylene 100-42-5 Styrene 75-25-2 Bromoform 79-34-5 1,1,2,2-Tetrachloop	1A VOLATILE ORGANICS ANALYSIS DATA Lab Name: FMETL NJDEP#: Project: 97-1251 Case No.: 5610 Location Matrix: (soil/water) SOIL Las Sample wt/vol: 10.0 (g/ml) G Las Level: (low/med) MED Data % Moisture: not dec. 0 Data GC Column: RTX502. ID: 0.25 GC Column: RTX502. ID: 0.25 Soil Extract Volume: 25000 (uL) Sate CAS NO. COMPOUND (ug/L or ug/Kg 1330-20-7 o-Xylene 1330-20-7 o-Xylene 100-42-5 Styrene 75-25-2 Bromoform 79-34-5 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	1A VOLATILE ORGANICS ANALYSIS DATA SHEET Lab Name: FMETL NJDEP#: 13461 Project: 97-1251 Case No.: 5610 Location: 9007 Matrix: (soil/water) SOIL Lab Sample Sample wt/vol: 10.0 (g/ml) G Lab File 1D: Level: (low/med) MED Date Receive % Moisture: not dec. 0 Date Analyze GC Column: RTX502. ID: 0.25 (mm) Dilution Fact Soil Extract Volume: 25000 (uL) Soil Aliquot V CONCENTRATION UNIT CAS NO. COMPOUND (ug/L or ug/Kg) UG/I 1330-20-7 o-Xylene 1 1 1 1 100-42-5 Styrene 1 1 1 1 79-34-5 1,1,2,2-Tetrachloroethane 1 1 1 1	1A VOLATILE ORGANICS ANALYSIS DATA SHEET Lab Name: FMETL NJDEP#: 13461 Project: 97-1251 Case No.: 5610 Location: 9007 SD Matrix: (soil/water) SOIL Lab Sample ID: 9 Sample ID: 9 Sample wt/vol: 10.0 (g/ml) G Lab File ID: 9 Sample ID: 9 Level: (low/med) MED Date Received: 9 Soite Analyzed: 9 % Moisture: not dec. 0 Date Analyzed: 9 Soit Analyzed: 9 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 9 Soit Extract Volume: 25000 (uL) Soil Aliquot Volum CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 1330-20-7 o-Xylene 100-42-5 100-42-5 100-42-5 Styrene 100-42-5 11,1,2,2-Tetrachloroethane	1A FIELD VOLATILE ORGANICS ANALYSIS DATA SHEET Trip Lab Name: FMETL NJDEP#: 13461 Trip Project: 97-1251 Case No.: 5610 Location: 9007 SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 5610.07 SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 5610.07 SDG No.: Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB00783 Level: (low/med) MED Date Received: 8/8/00 % Moisture: not dec. 0 Date Analyzed: 8/11/00 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 1330-20-7 o-Xylene 500 500 500 100-42-5 Styrene 500 500 7525-2 Bromoform 500 500 79-34-5 1,1,2,2-Tetrachloroethane 500	1A FIELD ID: VOLATILE ORGANICS ANALYSIS DATA SHEET Trip Blank Lab Name: FMETL NJDEP#: 13461 Project: 97-1251 Case No.: 5610 Location: 9007 SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 5610.07 Sde No.: Matrix: (soil/water) SOIL Lab Sample ID: 5610.07 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB007834.D Level: (low/med) MED Date Received: 8/8/00 % Moisture: not dec. 0 Date Analyzed: 8/11/00 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 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 <

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	١	VOLATILE ORGANICS	ANALYSIS DA	TA SHEET		FIELD ID:	- <u></u> ,
		TENTATIVELY IDE	NTIFIED COMP(DUNDS		Trin Bla	nk
Lab Name:	FMETL		NJDEP#	#: <u>13461</u>			
Project:	97-125	1 Case No.: <u>56</u>	10 Locat	ion: <u>9007</u> .	SC	OG No.:	
Matrix: (soil/	water)	SOIL	L	_ab Sample	ID:	5610.07	
Sample wt/v	ol:	<u>10.0 (g/ml) G</u>	L	ab File ID:	-	VB007834.D	
Level: (low/i	med)	MED	Ĩ	Date Receiv	ved:	8/8/00	
% Moisture:	not dec.	0	[Date Analyz	ed:	8/11/00	
GC Column:	RTX5	02. ID: <u>0.25</u> (mm) [Dilution Fac	tor:	1.0	
Soil Extract	Volume:	25000 (uL)	ę	Soil Aliquot	Volur	me: <u>50</u>	(uL)
Number TIC	e found:	0	CONCENTR (ug/L or ug/K	ATION UNI	ITS: /KG		
	5 IOUIIG.			r	··		
CAS NO.			E	RT	ES	T. CONC.	Q

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J	1A		FIELD ID.	
VOL	ATILE ORGANICS ANALYS	SIS DATA SHEET	B-000	7/18/) 1
Lab Name: FMETL	N	IJDEP # <u>13461</u>	B-3007	
Project:	Case No.: 5840	Location: 9007 SI)G No.:	
Matrix: (soil/water) SC) L	Lab Sample ID:	5840.01	
Sample wt/vol: 10	9 (a/ml) G	Lah File ID	VC004357	D
		Det- Deseive d	44/0/00	<u></u>
Level: (low/med) Mi		Date Received:	11/8/00	
% Moisture: not dec. 12	.28	Date Analyzed:	11/9/00	
GC Column: Rtx502.2	ID: <u>0.25</u> (mm)	Dilution Factor:	1.0	
Soil Extract Volume: 250	00 (uL)	Soil Aliquot Volu	me: 50	(uL)
		·		、 ,
	CONC	ENTRATION UNITS:		
CAS NO.	COMPOUND (ug/L d	or ug/Kg) UG/KG		Q
	A - und a la la	·	1000	· · · · ·
107028	<u>Acrolein</u>		1800	
75650	tert-Butyl alcohol		3400	
1634044	Methyl-tert-Butyl ether		780	- <u>U</u>
109202	Di-isopropyl ether		520	
75718	Dichlorodifluoromethane		1000	
74.97.3	Chloromethane		260	
75-01-4	Vinvl Chloride		780	
74-83-9	Bromomethane		520	
75-00-3	Chloroethane		780	
75-69-4	Trichlorofluoromethane		520	
75-35-4	1 1-Dichloroethene		260	<u> </u>
67-64-1	Acetone		520	- <u>U</u>
75-15-0	Carbon Disulfide	·	260	Ŭ
75-09-2	Methylene Chloride		480	
156-60-5	trans-1.2-Dichloroethene		520	Ū
75-35-3	1.1-Dichloroethane		260	U
108-05-4	Vinyl Acetate		780	U
78-93-3	2-Butanone		1300	~ <u> </u>
	cis-1,2-Dichloroethene		260	U
67-66-3	Chloroform		260	U
75-55-6	1,1,1-Trichloroethane		260	υ
56-23-5	Carbon Tetrachloride		520	U
71-43-2	Benzene		260	U
107-06-2	1,2-Dichloroethane		520	U
79-01-6	Trichloroethene		260	U
78-87-5	1,2-Dichloropropane		260	U
75-27-4	Bromodichloromethane		260	U
110-75-8	2-Chloroethyl vinyl ether		520	U
10061-01-5	cis-1,3-Dichloropropene		260	<u> </u>
108-10-1	4-Methyl-2-Pentanone			<u> </u>
108-88-3	Toluene		260	U
10061-02-6	trans-1,3-Dichloropropene)	520	U
79-00-5	1,1,2-Trichloroethane		520	U
127-18-4	Tetrachloroethene		260	<u> U </u>
591-78-6	2-Hexanone		520	<u> </u>
126-48-1	Dibromochloromethane		520	U
108-90-7	Chlorobenzene		_260	U
100-41-4	Ethylbenzene		<u>520</u>	U

1	1A			FIELD IE).	
V	OLATILE ORGANICS A	NALYSIS DATA SH	EET	B-900		
Lab Name: FMETL		NJDEP # <u>134</u>	461			
Project:	Case No.: 5840	Location: 9	007 SI	DG No.: _		
Matrix: (soil/water)	SOIL	Lab Sa	mple ID:	5840.01		
Sample wt/vol:	10.9 (g/ml) <u>G</u>	Lab Fil	e ID:	VC004357	7.D	
Level: (low/med)	MED	Date R	eceived:	11/8/00	•	
% Moisture: not dec.	12.28	Date A	nalyzed:	11/9/00		
GC Column: Rtx502	2.2 ID: 0.25 (mm)	Dilutior	n Factor:	1.0		
Soil Extract Volume:	25000 (uL)	Soil Ali	quot Volu	me: <u>50</u>		(uL)
		CONCENTRATION	UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-20-7	m+p-Xvlenes			780	U	
1330-20-7	o-Xviene			520	U	
100-42-5	Styrene			520	U	
75-25-2	Bromoform			520	U	
79-34-5	1,1,2,2-Tetrachlord	oethane		520	<u> </u>	
541-73-1	1,3-Dichlorobenze	ne		780	<u> </u>	
106-46-7	1,4-Dichlorobenze	ne		780	<u> </u>	
95-50-1	1.2-Dichlorobenze	ne		780	U	f

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		NALYSIS DATA SHEET		FIELD ID.	
	TENTATIVELY IDENT	IFIED COMPOUNDS		B-0007()	W)_1
Lab Name: FMET	<u> </u>	NJDEP # <u>13461</u>		D-5007(1	
Project:	Case No.: 5840	Location: 9007	SE	DG No.:	
Matrix: (soil/water)	SOIL	Lab Sample	+ 1D:	5840.01	<u>_</u>
Sample wt/vol:	10.9 (g/ml) <u>G</u>	Lab File ID:		VC004357.D	
Level: (low/med)	MED	Date Receiv	ved:	11/8/00	
% Moisture: not dec	. <u>12.28</u>	Date Analyz	zed:	11/9/00	
GC Column: Rtx5	502.2 ID: 0.25 (mm)	Dilution Fac	stor:	1.0	
Soil Extract Volume	: <u>25000</u> (uL)	Soil Aliquot	Volur	me: <u>50</u>	(uL)
Number TICs found	: <u> 0 </u>	CONCENTRATION UN (ug/L or ug/Kg) UG,	ITS: /KG	<u></u>	
CAS NO.	COMPOUND NAME	RT	ES	T. CONC.	Q

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J	2 1A			FIELD ID.		
VOLATILE ORGANICS ANALYSIS DATA SHEET			B-90	07(W)-2		
Lab Name: FMETL		_ NJDEP # <u>13461</u>]		
Project:	Case No.: 5840	Location: 9007	SDG No.:			
Matrix: (soil/water)	SOIL	Lab Sample I	D: 5840.02			
Sample wt/vol:	12.2 (g/ml) G	Lab File ID:	VC00435	8.D		
Level: (low/med)	MED	Date Receive	ed: 11/8/00	— <u> </u>		
% Moisture: not dec.	12.13	Date Analyze	d: <u>11/9/00</u>			
GC Column: Rtx502	2.2 ID: 0.25 (mm)	Dilution Facto	or: 1.0			
Coll Extract Volume:	25000 (11)	Soil Aliquot V		(u1.)		
Soil Extract volume.	<u>23000</u> (uL)	Sult Aliquot v		(uc)		
	CO.	NCENTRATION UNIT	'S:			
	COMPOLIND (up	v/Lorug/Kg) UG/k	6. (G	0		
UAS NO.				Q		
107028	Acrolein		1600	U		
107131	Acrylonitrile		1600	<u> </u>		
75650	tert-Butyl alcohol		3000	U		
1634044	Methyl-tert-Butyl ether		700	<u> </u>		
108203	Di-isopropyl ether		470	<u> </u>		
75718	Dichlorodifluoromethar	ne	940	<u> </u>		
	Chloromethane		230	<u> </u>		
75-01-4	Vinyl Chloride		700	U		
74-83-9	Bromomethane		470	<u> </u>		
75-00-3	Chloroethane		700			
75-69-4	<u>I richlorofluoromethane</u>	∋ <u>, </u>	470			
75-35-4	1,1-Dichloroethene	,,,	230	<u> </u>		
67-64-1	Acetone		4/0			
75-15-0	Carbon Disuinde	/w/w	230			
<u>75-09-2</u>	trana 1 2 Diablaraatha		440	J		
			470			
		v	200			
79.03.3	2 Butanono		1200			
70-93-3	cis-1 2-Dichloroethone		220			
67-66-3	Chloroform		230			
75-55-6	1 1 1-Trichloroethane		230			
56-23-5	Carbon Tetrachloride		470			
71-43-2	Benzene	···	230			
107-06-2	1.2-Dichloroethane		470			
79-01-6	Trichloroethene		230	<u> </u>		
78-87-5	1.2-Dichloropropane		230			
75-27-4	Bromodichloromethan	9	230	Ū		
110-75-8	2-Chloroethyl vinyl eth	ei	470	Ū		
10061-01-5	cis-1,3-Dichloropropen	e	230	U		
108-10-1	4-Methyl-2-Pentanone		470	U		
108-88-3	Toluene		230	<u> </u>		
10061-02-6	trans-1,3-Dichloroprop	ene	470	U		
79-00-5	1,1,2-Trichloroethane		470	<u> U </u>		
127-18-4	<u>Tetrachloroethene</u>		230	U		
591-78-6	2-Hexanone		470	U		
126-48-1	Dibromochloromethane	e	470	U		
108-90-7	Chlorobenzene		230	U		
100-41-4	Ethylbenzene		470	<u> U </u> }		

, 1A				FIELD ID.		
VOLATILE ORGANICS ANALYSIS DATA SHEET			B-9007(W)-2			
Lab Name: <u>FMETL</u>		NJDEP # <u>13</u>	461			
Project:	Case No.: 5840) Location: 9	007 SE)G No.: _		
Matrix: (soil/water) SC)IL	Lab Sa	mple ID:	5840.02		
Sample wt/vol: 12	.2 (g/ml) G	Lab Fil	e ID:	VC004358	3.D	
Level: (low/med) ME	ED	Date P	leceived:	11/8/00		
% Moisture: not dec. 12	.13	Date A	nalyzed:	11/9/00		
GC Column: Rtx502.2	ID: 0.25 (mm)	Dilutio	n Factor:	1.0		
Soil Extract Volume: 250)00 (uL)	Soil Al	iquot Volur	ne: <u>50</u>		(uL)
		CONCENTRATIO	N UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1220 20-7	m+n-Xvlenes			700	U	
1330-20-7				470	Ū	1
100-42-5	Styrene			470	Ū	
75-25-2	Bromoform			470	U	
79-34-5	1 1 2 2-Tetrachloroethane			470	i U	
541.73-1	541-73-1 1.3-Dichlorobenzene			700	U	
106-46-7	1.4-Dichlorobenze	e		700	U	
95-50-1	1.2-Dichlorobenze	ene		700	U	

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VOLATILE ORGANICS ANALYSIS DATA SHEET				FIELD ID.		
	TENTATIVELY IDENT	IFIED COMPO	DUNDS			
Lab Name: FMETL		NJDEP 1	# 13461		B-9007(W	/)-2
Project:	Case No.: 5840	Locati	on: <u>9007</u> .	_ SC)G No.:	
Matrix: (soil/water)	SOIL	L	ab Sample.	ID:	5840.02	
Sample wt/vol:	<u>12.2 (g/ml) G</u>	L	ab File ID:	-	VC004358.D	· ·
Level: (low/med)	MED	C	Date Receiv	ed:	11/8/00	_
% Moisture: not dec.	12.13	Ε	Date Analyz	ed:	11/9/00	
GC Column: Rtx50	<u>2.2</u> ID: <u>0.25</u> (mm)	[Dilution Fac	tor:	1.0	
Soil Extract Volume:	25000 (uL)	S	Soil Aliquot	Volur	me: <u>50</u>	(uL)
		CONCENTR		TS: /KG		
Number TICs found:			<u> </u>			
CAS NO.	COMPOUND NAME		RT	ES	T. CONC.	Q

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Client :	US. Army	Project # :	5840
	DPW. SELFM-PW-EV	Location :	9007
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :)8-Nov-00
Matrix :	Soil	Date Extracted :	09-Nov-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	09-Nov-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5840.01	B-9007(w)-1	1.00	15.42	87.72	174	ND
5840.02	B-9007(w)-2	1.00	15.40	87.87	174	ND
						1
						1
		<u> </u>				
	······································					
		<u> </u>				
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				+		
NUMITOD DI ANU	TTPI KA26	1 00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit
	1A		FIELD ID	FIELD ID:		
VOLA	TILE ORGANICS ANALY	SIS DATA SHEET	900	7-B6]	
Lab Name: <u>FMETL</u>		NJDEP#: 13461				
Project: Evans	Case No.: 5852	Location: 9007 S	DG No.:			
Matrix: (soil/water) SO	11	Lab Sample ID:	5852.02			
Provente with the state of the		l ah Eile ID:	VB008787	<u>ה</u>		
Sample wivol: 11.	- (g/m) <u>d</u>		444900		-	
Level: (low/med) ME	D	Date Received:	11/13/00	· · · · · ·		
% Moisture: not dec. 17.	55	Date Analyzed:	11/15/00			
GC Column: RTX502.	ID: 0.25 (mm)	Dilution Factor:	1.0			
Soil Extract Volume: 2500	0 (III)	Soil Aliquot Vol	ume: 50	 (u	L)	
Soli Extract volume. 250		Con Anquor Von	<u> </u>	(2	-/	
	CON	ICENTRATION UNITS:				
CAS NO	COMPOUND (ug/l	or ua/Ka) UG/KG		Q		
107028	Acrolein		1800	<u> U </u>		
107131	Acrylonitrile		1800	U		
75650	tert-Butyl alcohol		3300			
1634044	Methyl-tert-Butyl ether		770			
108203	Di-isopropyl ether		510	<u> </u>		
75718	Dichlorodifluoromethane)	1000			
74-87-3	Chloromethane		260			
75-01-4	Vinyl Chloride					
74-83-9	Bromomethane		770	<u> </u>		
75-00-3			<u>770</u>	11		
75-69-4	I richlorotiuoromethane		260			
75-35-4			510			
67-64-1	Acetone Disulfide		260			
75-15-0	Mothylone Chlorida		500	JB		
	trans-1 2-Dichloroethen	ρ	510	<u> </u>		
	1 1-Dichloroethane		260	<u> </u>		
108-05-4	Vinvl Acetate		770	U		
78-03-3	2-Butanone		1200			
156-59-2	cis-1 2-Dichloroethene		260	υ		
67-66-3	Chloroform		320			
71-55-6	1.1.1-Trichloroethane		260			
56-23-5	Carbon Tetrachloride		510	υ		
71-43-2	Benzene		260	U		
107-06-2	1.2-Dichloroethane		510	U		
79-01-6	Trichloroethene		260	U		
78-87-5	1.2-Dichloropropane		260	U		
75-27-4	Bromodichloromethane		260	U		
110-75-8	2-Chloroethyl vinyl ethe	1	510	U		
10061-01-5	cis-1,3-Dichloropropene	e	260	U		
108-10-1	4-Methyl-2-Pentanone		510	<u> </u>		
· 108-88-3	Toluene		260	<u> U </u>		
10061-02-6	trans-1,3-Dichloroprope	ene	510	U	•	
79-00-5	1,1,2-Trichloroethane		<u>510</u>	<u> </u>		
127-18-4	Tetrachloroethene		260	<u> </u>		
591-78-6	2-Hexanone		510	<u>U</u>		
124-48-1	Dibromochloromethane	<u> </u>	<u> </u>	<u> </u>		
108-90-7	Chlorobenzene	· · · · · · · · · · · · · · · · ·	260			
100-41-4	Ethylbenzene		510	U .]	

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	1A							FIELD ID:		
	VC	LATILE ORG	ANICS A	ANALY	SIS DATA	A SHE	ET	90	07-B6	
Lab Name:	FMETL				NJDEP#:	134	61			
Project:	Evans	Case N	lo.: <u>585</u> 2	2	Locatio	n: <u>90</u>	07 S	DG No.:		
Matrix: (soil/	water)	SOIL			La	b Sar	nple ID:	5852.02		
Sample wt/vo	ol:	1.9 (g.	/ml) <u>G</u>		La	b File	ID:	VB00878	7.D	
Level: (low/r	ned)	MED			Da	ate Re	ceived:	11/13/00		
% Moisture:	% Moisture: not dec. <u>17.55</u> Date Ar					alyzed:	11/15/00			
GC Column:	RTX502	. ID: <u>0.25</u>	(mm)		Dil	lution	Factor:	1.0		
Soil Extract V	Volume: 2	5000 (ı	ıL)		So	il Alic	juot Volu	ime: <u>50</u>		(uL)
				CON						
	- -		ID	(ua/					0	
CASING	٦.	COMPOUR	4U	(ug/L	. or ug/kg,)	UG/KG		Q	
00-00	-0	m+p-Xyle	nes					770	U	
95-47-	-6	o-Xylene						510	<u>U</u>	
100-4	2-5	Styrene						510	<u> </u>	
75-25	-2	Bromofor	m					510	υ	
79-34	-5	1,1,2,2-Te	<u>etrachlor</u>	oethar	ne			510	<u> </u>	
541-7	3-1	1,3-Dichle	probenze	ene				770		
106-4	6-7	1,4-Dichle	orobenze	ene				770	<u> </u>	
95-50	-1	1,2-Dichlo	probenze	ene				770	<u> U</u>	

	,		1E				יחו מ וחי	
		TENT	E ORGANICS A	IFIED COMP				
Lab Name:	FMETL			NJDEP#	⊧ : <u>13461</u>		9007-E	36
Project:	Evans		Case No.: 5852	Locat	ion: <u>9007</u>	_ SD	G No.:	
Matrix: (soil/	water)	SOIL		L	ab Sample	ID: <u></u>	5852.02	
Sample wt/vo	ol:	11.9	(g/ml) <u>G</u>	I	ab File ID:	<u>\</u>	VB008787.D	
Level: (low/r	ned)	MED		[Date Receiv	ved:	11/13/00	
% Moisture:	not dec.	17.55		[Date Analyz	ed:	11/15/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	[Dilution Fac	tor:	1.0	
Soil Extract \	/olume:	25000	(uL)	ç	Soil Aliquot	Volun	ne: <u>50</u>	(uL)
				CONCENTR		TS:		
Number TICs	s found:	0		(ug/L or ug/K	.g) <u>UG</u> /	nu -		
CAS NO.		COMF	OUND NAME		RT	EST	Г. CONC.	Q

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	1A	FIE	ELD ID:
	VOLATILE ORGANICS ANALYSIS D	ATA SHEET	9007-NW1
Lab Name: FME	ſLNJDE	P#: <u>13461</u>	
Project: Evan	s Case No.: 5852 Loc	ation: 9007 SDG N	lo.:
Motrive (apil/water)		Lab Sample ID: 5850	2 03
Matrix: (soli/water)	<u>301</u>		2.00
Sample wt/vol:	<u>11.0 (g/ml) G</u>	Lab File ID: VB0	08788.D
Level: (low/med)	MED	Date Received: 11/1	3/00
% Moisture: not de	. 12.48	Date Analyzed: 11/1	5/00
GC Column: RT	(502. ID: <u>0.25</u> (mm)	Dilution Factor: 1.0	
Soil Extract Volume	e: <u>25000 (</u> uL)	Soil Aliquot Volume:	50 (uL)
	CONCENT	RATION UNITS:	
CAS NO.	COMPOUND (ug/L or ug	/Kg) UG/KG	Q
107028	Acrolein	180	
107131			
75650			
1634044			
108203	Di-Isopropyl etner	52	
75718	Dichlorodifluoromethane		
74-87-3	Chloromethane	20	
75-01-4			
74-83-9	Bromomethane	52	
75-00-3	Chloroethane		
75-69-4	Trichlorofluoromethane	52	
75-35-4	<u>1,1-Dichloroethene</u>	2	
67-64-1	Acetone	52	
75-15-0	Carbon Disulfide	2	
75-09-2	Methylene Chloride		
<u>156-60-5</u>	trans-1,2-Dichloroethene	5	
75-34-3	1,1-Dichloroethane	2(
108-05-4	Vinyl Acetate	7	70 U
<u>78-93-3</u>	2-Butanone	120	00
156-59-2	cis-1,2-Dichloroethene	2	<u>60 U</u>
67-66-3	Chloroform	2	60 <u>U</u>
71-55-6	1,1,1-Trichloroethane	2	<u>60 U </u>
56-23-5	Carbon Tetrachloride	5	<u>20 U</u>
71-43-2	Benzene	2	<u>60 U</u>
107-06-2	1,2-Dichloroethane	5	20 U
79-01-6	Trichloroethene	2	<u>60 U</u>
<u>78-87-5</u>	1,2-Dichloropropane	2	<u>60 U</u>
75-27-4	Bromodichloromethane	2	<u>60 U</u>
110-75-8	2-Chloroethyl vinyl ether	5	20 U
10061-01-5	cis-1,3-Dichloropropene	2	<u>60 U</u>
108-10-1	4-Methyl-2-Pentanone	5	<u>20 U</u>
108-88-3	Toluene	2	<u>60 U</u>
10061-02-6	trans-1,3-Dichloropropene	5	<u>20 U </u>
79-00-5	1,1,2-Trichloroethane	5	20 U
127-18-4	Tetrachloroethene	2	60 U
591-78-6	2-Hexanone	5	<u>20 U </u>
124-48-1	Dibromochloromethane	5	20 U
108-90-7	Chlorobenzene	2	<u>60 U </u>
100-41-4	Ethylbenzene	5	20 U

		1A			FIELD I	D:	
	V	OLATILE ORGANICS A	NALYSIS DATA SH	IEET	900	Z_NI\A/1	
Lab Name:	FMETL		NJDEP#: <u>13</u>	3461	300		
Project:	Evans	Case No.: 5852	Location:	9007 SI	DG No.: _		
Matrix: (soil/	water)	SOIL	Lab Sa	ample ID:	5852.03		
Sample wt/ve	ol:	<u>11.0 (g/ml) G</u>	Lab Fi	ile ID:	VB008788	3.D	
Level: (low/r	ned)	MED	Date F	Received:	11/13/00		
% Moisture:	not dec.	12.48	Date A	Analyzed:	11/15/00		
GC Column:	RTX50)2. ID: 0.25 (mm)	Dilutio	n Factor:	1.0		
Soil Extract V	Volume:	25000 (uL)	Soil A	liquot Volu	me: <u>50</u>		(uL)
			CONCENTRATIO	N UNITS:			
CAS NO	Э.	COMPOUND	(ug/L or ug/Kg)	UG/KG	<u> </u>	Q	
00-00	-0	m+p-Xylenes			770	U	
95-47	-6	o-Xylene			520	U	
100-4	2-5	Styrene			520	U	
75-25	-2	Bromoform			520	<u> </u>	
79-34	-5	1,1,2,2-Tetrachlord	pethane		520	U	
541-7	3-1	1,3-Dichlorobenze	ne		770	U	_
106-40	6-7	1,4-Dichlorobenze	ne		770	<u> </u>	
95-50	-1	1,2-Dichlorobenze	ne		770	U	

VOLATILE ORGANICS ANALYSIS DATA SHEET							FIELD ID:	
1 ob Nomo:		TENTA	ATIVELY IDEN				9007-N	W1
Lao Name.				NJDEF	F. <u>13401</u>	<u> </u>	· · · · · · · ·	
Project:	Evans		Case No.: <u>585</u> 2	2Locat	ion: <u>9007</u>	SD	G No.:	
Matrix: (soil/v	vater)	SOIL		l	.ab Sample	ID: <u></u>	5852.03	
Sample wt/vo	ol:	11.0	(g/ml) <u>G</u>	I	ab File ID:	1	VB008788.D	
Level: (low/n	ned)	MED		i	Date Receiv	ved:	11/13/00	
% Moisture: r	not dec.	12.48		I	Date Analyz	ed:	11/15/00	
GC Column:	RTX50	02. ID:	0.25 (mm)	I	Dilution Fac	tor:	1.0	
Soil Extract V	olume:	25000	(uL)	Ş	Soil Aliquot	Volun	ne: <u>50</u>	(uL)
				CONCENTR	ATION UN	TS:		
Number TICs	found:	0		(ug/L or ug/K	(g) UG.	/KG		
CAS NO.		COMP	OUND NAME		RT	EST	F. CONC.	Q I

	1A		FIELD II	D:	
	VOLATILE ORGANICS ANAL	YSIS DATA SHEET	9007	7-SW1	7
Lab Name: FMET	L	NJDEP#: 13461	_		
Project: Evans	Case No.: 5852	Location: 9007 S	DG No.:		
Matrix: (soil/water)	SOIL	Lab Sample ID:	5852.04		
Cample utfuelt	11.5 (g/ml) G				-
Sample w/vol.	<u>11.5</u> (g/m) <u>G</u>		VD000708	<u></u>	
Level: (low/med)	MED	Date Received:	11/13/00		
% Moisture: not dec	. 9.19	Date Analyzed:	11/15/00		
GC Column: RTX	502. ID: 0.25 (mm)	Dilution Factor:	1.0		
Soil Extract Volume	: 25000 (uL)	Soil Aliquot Volu	Ime: 50	 (u	L)
Son Exitably situnto		oon / inquot for	<u></u>	(u	-)
	со	NCENTRATION UNITS:			
CAS NO.	COMPOUND (ug	/L or ua/Ka) UG/KG		Q	
0/10/1101		<u> </u>			
107028	Acrolein		1700	U	
107131	Acrylonitrile		1700	U	
75650	tert-Butyl alcohol		3100	<u> </u>	
1634044	Methyl-tert-Butyl ether		720	<u> </u>	
108203	Di-isopropyl ether		480	U	
75718	Dichlorodifluoromethan	e	960	U	
74-87-3	Chloromethane		240	U	
75-01-4	Vinyl Chloride		720	U	
74-83-9	Bromomethane		480	U	
75-00-3	Chloroethane	· · ·	720	U	
75-69-4	Trichlorofluoromethane		480	U	
75-35-4	1.1-Dichloroethene		240	U	
67-64-1	Acetone		480	υ	
75-15-0	Carbon Disulfide		240	υ	
75-09-2	Methylene Chloride		550	В	
156-60-5	trans-1.2-Dichloroether	10	480	U	
75-34-3	1.1-Dichloroethane		240	U	
108-05-4	Vinvl Acetate		720	Ū	
78-93-3	2-Butanone		1100		
156-59-2	cis-1.2-Dichloroethene	· · · · · · · · · · · · · · · · · · ·	240	U	
67-66-3	Chloroform		240	Ŭ	
71-55-6	1.1.1-Trichloroethane		240	U	
56-23-5	Carbon Tetrachloride		480	Ū	
71-43-2	Benzene		240	Ū	
107-06-2	1.2-Dichloroethane		480	Ū	
79-01-6			240	U	
78-87-5	1.2-Dichloropropane		240	U	
75-27-4	Bromodichloromethane		240	Ū	
110-75-8	2-Chloroethyl vinyl ethe	<u></u>	480	Ū	
10061-01-5	cis-1 3-Dichloropropen	P	240	<u> </u>	
108-10-1	4-Methyl-2-Pentanona	<u> </u>	480	<u> </u>	
108-88-3	Toluene		240	11	
100-00-0	trans-1.3-Dichloroprop	ene	480	11	• •
70-00-5	1.1.2-Trichloroethane		480		C
107-18-4	Tetrachloroethene		240	U U	
501-78-6	2-Hexanone		480		
104 49 1	Dibromochloromothon		480		
102.00.7	Chlorobenzene	· · · · · · · · · · · · · · · · · · ·	<u></u>		
100-90-7	Ethylbenzene		480	11	
100-41-4				. V	1

		1A			FIELD I	D:	
	V	DLATILE ORGANICS A	NALYSIS DATA	SHEET	0007 8141		
Lab Name:	FMETL		NJDEP#:	13461		7-5991	
Project:	Evans	Case No.: 5852	2 Location	n: <u>9007</u> S	DG No.:		. <u> </u>
Matrix: (soil/w	vater)	SOIL	Lat	Sample ID:	5852.04		
Sample wt/vo	ol:	11.5 (g/ml) <u>G</u>	Lat	File ID:	VB00878	9.D	
Level: (low/n	ned)	MED	Dat	te Received:	11/13/00		
% Moisture: r	not dec.	9.19	Dat	te Analyzed:	11/15/00		
GC Column:	RTX50	2. ID: <u>0.25</u> (mm)	Dilu	ution Factor:	1.0		
Soil Extract V	/olume: 2	25000 (uL)	Soi	l Aliquot Volu	me: <u>50</u>		(uL)
			CONCENTRAT	ION UNITS:			
CAS NO).	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
00-00-	0	m+p-Xylenes			720	U	
95-47-	6	o-Xylene			480	U	
100-42	2-5	Styrene			480	U	
75-25-	2	Bromoform			480	<u> U</u>	
79-34-	5	1,1,2,2-Tetrachlord	pethane		480	U	
541-73	3-1	1,3-Dichlorobenze	ne		720	U	
106-46	6-7	1,4-Dichlorobenze	ne		720	U	
95-50-	1	1,2-Dichlorobenze	ne <u>.</u>		720	U	

	v	VOLATILE		ANALYSIS DA	TA SHEET		FIELD ID:	
		TENTA	TIVELY IDENT	TIFIED COMF	OUNDS		9007-S	W1
Lab Name:	FMETL			NJDEP	#: <u>13461</u>			
Project:	Evans	(Case No.: <u>585</u> 2	2Loca	tion: <u>9007</u>	_ SI	DG No.:	
Matrix: (soil/\	water)	SOIL			Lab Sample	D:	5852.04	
Sample wt/vo	ol:	11.5	(g/ml) <u>G</u>		Lab File ID:		VB008789.D	
Level: (low/r	ned)	MED			Date Receiv	ved:	11/13/00	
% Moisture:	not dec.	9.19			Date Analyz	zed:	11/15/00	
GC Column:	RTX5	02. ID:	0.25 (mm)		Dilution Fac	tor:	1.0	
Soil Extract \	√olume:	25000	(uL)		Soil Aliquot	Volur	me: <u>50</u>	(uL)
·						ITS:	·	
Number TICs	s found:	0		(ug/L of ug/i		nu		
CAS NO.		СОМРО	DUND NAME	·	RT	ES	T. CONC.	Q

	1A	FIELD I	D:
	VOLATILE ORGANICS ANALYSIS DATA SI	HEET	7-NE1
Lab Name: FMET	LNJDEP#: 1	3461	
Projećt: Evans	Case No.: 5852 Location:	9007 SDG No.: _	
Matrix: (soil/water)	SOIL Lab S	ample ID: 5852.05	
	11.1 (<i>a/m</i>) C l ab E		
Sample wilvol:			
Level: (low/med)	MED Date	Received: <u>11/13/00</u>	
% Moisture: not dec	2. <u>11.4</u> Date .	Analyzed: <u>11/15/00</u>	
GC Column: RTX	(502. ID: 0.25 (mm) Dilutic	on Factor: 1.0	
Soil Extract Volume	: 25000 (uL) Soil A	liquot Volume: 50	(uL)
	CONCENTRATIO	N UNITS:	
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
107000	Aproloin	1900	
10/028		1800	
75650	tert-Butyl alcohol	3300	
1634044	Methyl-tert-Butyl ether	760	U
108203	Di-isopropyl ether	510	U
75718	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> </u>
67-64-1	Acetone	510	<u> </u>
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	630	В
156-60-5	trans-1,2-Dichloroethene	510	
75-34-3	1,1-Dichloroethane	250	
108-05-4	Vinyl Acetate	760	<u> </u>
78-93-3	2-Butanone	1200	
156-59-2	cis-1,2-Dichloroethene	250	
67-66-3		250	
71-55-6	Carbon Totrapharide	<u> </u>	
	Bonzono	250	
107-06-2	1 2-Dichloroethane	510	
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> </u>
108-10-1	4-Methyl-2-Pentanone	510	U
108-88-3	Toluene	250	<u> </u>
10061-02-6	trans-1,3-Dichloropropene	510	U
79-00-5	1,1,2-Trichloroethane	510	
127-18-4	Tetrachloroethene	250	<u> </u>
591-78-6	2-Hexanone	510	
124-48-1	Dibromochloromethane	510	
108-90-7	Chlorobenzene	250	
1 100-41-4	t Ethylbenzene	1 510	I U 1

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	1A		FIELD I	D:	
	VOLATILE ORGANICS ANA	ALYSIS DATA SHEET	900	7-NE1	
Lab Name: <u>FME</u>	TL.	NJDEP#:13461			
Project: <u>Eva</u>	ns Case No.: 5852	Location: 9007	SDG No.:		
Matrix: (soil/water)	SOIL	Lab Sample ID	: 5852.05		
Sample wt/vol:	11.1 (g/ml) G	Lab File ID:	VB00879	0.D	
Level: (low/med)	MED	Date Received	I: <u>11/13/00</u>		
% Moisture: not de	эс. 11.4	Date Analyzed	: <u>11/15/00</u>		
GC Column: RT	X502. ID: 0.25 (mm)	Dilution Factor	: 1.0		
Soil Extract Volum	ne: 25000 (uL)	Soil Aliquot Vo	lume: 50		(uL
	0		` .		
	L.	UNCENTRATION UNITS		_	
CAS NO.	COMPOUND (u	ug/L or ug/Kg) UG/K(<u> </u>	Q	
00-00-0	m+p-Xylenes		760	·U	
95-47-6	o-Xylene		<u>510</u>	U	
100-42-5	Styrene		510	U	
75-25-2	Bromoform		510	U	
79-34-5	1,1,2,2-Tetrachloroet	thane	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	

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	1	/OLATIL	E ORGANICS	ANALYSIS DA	IA SHEET			
		TENT		NTIFIED COMP	DUNDS		0007 N	- 4
Lab Name:	FMETL			NJDEP#	t: <u>13461</u>		9007-146	
Project:	Evans		Case No.: 58	52Locat	ion: <u>9007</u>	S(DG No.:	
Matrix: (soil/v	vater)	SOIL		l	ab Sample	ID:	5852.05	
Sample wt/vo	ol:	<u>11.1</u>	(g/ml) <u>G</u>	[ab File ID:		VB008790.D	
Level: (low/n	ned)	MED		l	Date Receiv	/ed:	11/13/00	
% Moisture: r	not dec.	11.4		(Date Analyz	ed:	11/15/00	
GC Column:	RTX50	02. ID:	<u>0.25</u> (mm)	t	Dilution Factor: 1.0			
Soil Extract V	/olume:	25000	(uL)	9	Soil Aliquot	Volu	me: <u>50</u>	(uL)
CONCENTRATION UNITS:								
Number TICs	s found:	0		(ug/L of ug/K	.g) <u>OG</u> ,	nu -		
CAS NO.		COMF	OUND NAME		RT	ES	T. CONC.	Q

			1A	N			FIELD 1	D:	
	١	OLATILE (ORGANICS	ANALYSIS D	ATA SHE	EET	900	7-951	
Lab Name:	FMETL			NJDE	:P#: <u>134</u>	61	900		
Project:	Evans	Ca	se No.: <u>585</u>	52 Loo	ation: 90	007 SE	DG No.: _		
Matrix: (soil/w	vater)	SOIL			Lab Sar	mple ID:	5852.06		
Comple with	, 		- (almi) G		Lob File	י <u>רו</u> י י			
Sample wive	л.	11.1	. (g/m) <u>a</u>		Lau File	5 ID.	VD00073		
Level: (low/m	ned)	MED	_		Date Re	eceived:	11/13/00		
% Moisture: r	not dec.	12.13			Date Ar	halyzed:	11/15/00		
GC Column:	BTX5)2. ID: 0.	 25 (mm)		Dilution	Factor:	1.0		
	(aluma)	05000	<u></u> (Coll Alia	wat Valu			61.)
Soll Extract V	oiume:	25000	(UL)		SOII AIIC	quot volui	ne: <u>50</u>		(uL)
				CONCENT					
		COMP						0	
CAS NO).	COMP	UUND	(ug/L or ug	µry)	UG/NG		Q	
107028	8	Acrol	ein	· · · · · · · · · · · · · · · · · · ·			1700	U	
10713	1	Acryl	onitrile				1700	<u> </u>	
75650		tert-B	utyl alcohol				3200	U	
163404	44	Meth	yl-tert-Butyl	ether			730	<u> </u>	
108203	3	Di-isc	propyl ethe	r			490	U	_
75718		Dichl	orodifluorom	nethane			970	<u> </u>	_
74-87-	<u>3</u>	Chlor	omethane				240	<u> </u>	_
75-01-4	4		<u>Chioride</u>				/30	<u> </u>	
74-83-	9	Brom	omethane				<u>490</u> 720		
75-00-	<u></u> 1	Trich	lorofluorome	thano	~~		490	<u> </u>	
75-35-	н Л	111	ichloroethei				240	11	
67-64-	1	Aceto	ne				490	Ū	
75-15-	0	Carbo	on Disulfide		····-		240	Ū	
75-09-2	2	Meth	ylene Chlori	de	· · · · · · · · · · · · · · · · · · ·		630	В	
156-60)-5	trans	-1,2-Dichlor	oethene			490	U	
75-34-	3	<u> </u>	ichloroetha	ne			240	<u> </u>	
108-05	5-4	Vinyl	Acetate				730	<u> </u>	_
78-93-	3	<u>2-But</u>	anone				1200		_
156-59	<u>)-2</u>	CIS-1,	2-Dichloroe	thene			240		_
	<u>3</u>		<u>Otorm</u> Trichlaracti			_	240	<u> </u>	
71-00-	<u>0</u> 5	Carb	on Tetrachie				<u></u>		
71-43-	<u>り</u>	Benz	ene	Jilde			240	<u> </u>	
107-06	<u></u> 3-2	1.2-0)ichloroetha	ne			490	Ū	
79-01-	<u> </u>	Trich	loroethene				240	U	- T
78-87-	5	1,2-D	ichloroprop	ane			240	U	
75-27-	4	Brom	odichlorom	ethane			240	<u>U</u>	
110-75	5-8	2-Ch	loroethyl vin	iyl ether			490	U	
10061	-01-5	cis-1,	,3-Dichlorop	propene			240	U	
108-10)-1	4-Me	thyl-2-Penta	anone			490	<u> U</u>	{
108-88	<u>3-3</u>	Tolue	ene	<u> </u>		_	240	<u>U</u>	<u> </u>
10061	<u>-02-6</u>	trans	-1,3-Dichlor	opropene		·	490	<u> </u>	·{
79-00-	5	1,1,2	- I richloroet	hane ·		· .	490	<u> </u>	
127-18	<u>3-4</u>		cnioroether	10			240	<u> </u>	
591-78	<u>3-0</u>	2-He	xarione	othana			490		
124-48	<u>ז-ר</u> 1-7		niochiorom nhenzene	emane			<u>490</u> 240	11	
100-41	<u></u>	Fthvl	benzene		····· , · ·····		490	11	
100-41	·					1		<u> </u>	

	1A			FIELD ID	D:	
VO	LATILE ORGANICS ANALY	YSIS DATA SHE	ΞT	900	7-SE1	
Lab Name: <u>FMETL</u>		NJDEP#: 1346	1			
Project: <u>Evans</u>	Case No.: 5852	Location: 900	07 SD	G No.: _		
Matrix: (soil/water) S	OIL	Lab Sam	ple ID:	5852.06		
Sample wt/vol: 1	1.7 (g/ml) G	Lab File	ID:	VB008791	.D	
Level: (low/med) M	1ED	- Date Red	eived:	11/13/00		
% Moisture: not dec. 1	2.13	Date Ana	alyzed: ·	11/15/00		
GC Column: RTX502.	. ID: 0.25 (mm)	Dilution F	actor:	1.0		
Soil Extract Volume: 25	5000 (uL)	Soil Aliqu	ot Volun	ne: <u>50</u>	((uL)
	201					
	CON	NCENTRATION (JNH 5:			
CAS NO.	COMPOUND (ug/l	L or ug/Kg) <u>l</u>	JG/KG		Q	
00-00-0	m+p-Xylenes			730	U]
95-47-6	o-Xylene			490	U	
100-42-5	Styrene			490	U	7
75-25-2	Bromoform			490	U	1
	1 1 2 2-Tetrachloroetha	ne		490	U	
79-34-5				700		7
<u>79-34-5</u> 541-73-1	1,3-Dichlorobenzene			730	U	
79-34-5 541-73-1 106-46-7	1,3-Dichlorobenzene			730	<u> </u>	

	VOLATI	1E LE ORGANICS A	NALYSIS DA	TA SHEET		FIELD ID:	
	TENT	ATIVELY IDENT	NTIFIED COMPOUNDS			0007 8	E1
Lab Name: <u>FM</u>	ETL		NJDEP#	#: <u>13461</u>		9007-3	
Project: Eva	ans	Case No.: 5852	Locat	ion: <u>9007</u>	S	DG No.:	
Matrix: (soil/wate	r) <u>SOIL</u>		L	.ab Sample	ID:	5852.06	
Sample wt/vol:	11.7	(g/ml) <u>G</u>	l	ab File ID:		VB008791.D	
Level: (low/med)	MED		ĺ	Date Receiv	/ed:	11/13/00	
% Moisture: not c	dec. <u>12.13</u>		ſ	Date Analyz	ed:	11/15/00	
GC Column: R	TX502. ID:	<u>0.25</u> (mm)	ſ	Dilution Fac	tor:	1.0	
Soil Extract Volur	me: <u>25000</u>	(uL)		Soil Aliquot	Volu	ime: <u>50</u>	(uL)
Number TICs fou	ınd: 0		CONCENTR (ug/L or ug/K	ATION UNI (g) <u>UG</u> /	TS: /KG		
[{		
CAS NO.	СОМ	POUND NAME		RT	ES	ST. CONC.	Q

		1A			FIELD IC	D:	
	VOL	ATILE ORGANICS A	NALYSIS DATA SH	EET			
Lab Name: F	-METL		NJDEP#: 134	161	900	7-SE2	
Broject:	Evans	Case No : 585		007 S	DG No.:		
				<u> </u>			_
Matrix: (soil/wa	ater) <u>SC</u>	DIL	Lab Sa	mple ID:	5852.07		
Sample wt/vol:	: <u>11</u>	.2(g/ml) <u>G</u>	Lab File	e ID:	VB008792	2.D	
Level: (low/me	ed) <u>M</u>	ED	Date R	eceived:	11/13/00		
% Moisture: no	ot dec. 16	.23	Date A	nalyzed:	11/15/00		
CC Column:	BTX502	ID: 0.25 (mm)	Dilution	Eactor:	1.0		
							6.1.3
Soil Extract Vo	plume: 250	000 (uL)	Soli Ali	quot volu	ime: <u>50</u>		(uL)
			CONCENTRATION	LONITS.		0	
CAS NO.		COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
107009		Acrolein			1900	U	7
107020		Acrylonitrile			1900	<u> </u>	
75650		tert-Butyl alcohol			3400	<u> </u>	
162404	1	Methyl-tert-Butyl e	ther		790	Ü	-
103404	<u> </u>	Di-isopropyl ether			530	Ū	
75718		Dichlorodifluorom	ethane		1100	Ū	
74-87-3		Chloromethane			260	Ū	
75-01-4	·	Vinvl Chloride	<u></u>		790	Ū	
74-83-9		Bromomethane			530	Ū	
75-00-3		Chloroethane			790	U	
75-69-4		Trichlorofluorome	thane		530	U	
75-35-4		1.1-Dichloroethen	e		260	U	
67-64-1	· · ·	Acetone			530	U	—
75-15-0	 1	Carbon Disulfide			260	υ	
75-09-2		Methylene Chlorid	le		790	В	
156-60-	-5	trans-1,2-Dichloro	ethene		530	U	
75-34-3	<u> </u>	1,1-Dichloroethan	e		260	U	
108-05-	-4	Vinvl Acetate			790	U	
78-93-3	3	2-Butanone			1200		
156-59-	-2	cis-1,2-Dichloroet	hene		260	<u> </u>	
67-66-3	3	Chloroform			260	<u> </u>	
71-55-6	3	1,1,1-Trichloroeth	ane		260	U	
56-23-5	5	Carbon Tetrachlo	ride		530	U	
71-43-2	2	Benzene	·		260	<u> </u>	
107-06-	-2	1,2-Dichloroethan	0		530	<u> </u>	_
79-01-6	5	Trichloroethene			260	<u> </u>	_
78-87-5	ō	1,2-Dichloropropa	ine		260	<u> </u>	
75-27-4	1	Bromodichlorome	thane		260	<u> </u>	_
110-75	-8	2-Chloroethyl viny	/l ether		530	U	
10061-	<u>01-5</u>	cis-1,3-Dichlorop	opene		260		
108-10	-1	4-Methyl-2-Penta	none		530	<u> </u>	_
108-88	-3	Toluene			260		
10061-	02-6	trans-1,3-Dichlore	propene	· .	530		_
79-00-5	5	1,1,2-Trichloroeth	lane		530		·
127-18	-4	Tetrachloroethen	8		260	<u> </u>	_
<u> </u>	-6	2-Hexanone			530	<u> </u>	
124-48	-1	Dibromochlorome	ethane		<u> </u>		_
108-90	-7	Chlorobenzene			260		_
100-41	-4	Ethylbenzene		1	530	1 U	1

			1A			FIELD ID	D:	
	VC	000	7 000					
Lab Name:	FMETL NJDEP#: 13461 9007-5							
Project:	Evans	Case No.:	5852	Location	n: <u>9007</u> S	DG No.:		
Matrix: (soil/w	water) <u>s</u>	SOIL		La	b Sample ID:	5852.07		
Sample wt/vo	ol: <u>1</u>	1.2 (g/ml)	G	La	b File ID:	VB008792	2.D	
Level: (low/r	ned) <u>M</u>	MED		Da	te Received:	11/13/00		
% Moisture:	not dec. 1	6.23		Da	te Analyzed:	11/15/00		
GC Column:	GC Column: RTX502. ID: 0.25 (mm) Dilution Factor:							
Soil Extract \	/olume: <u>2</u>	5000 (uL)		So	il Aliquot Volu	ime: <u>50</u>		(uL)
			co					
CAS NO).	COMPOUND	(ug/	/L or ug/Kg)	UG/KG		Q	
00-00-	0	m+p-Xylenes	}			790	U	
95-47-	-6	o-Xylene				530	U	_
100-42	2-5	Styrene				530	<u> </u>	
75-25-	2	Bromoform				530	<u> </u>	
79-34-	-5	1,1,2,2-Tetra	chloroetha	ane		530	<u> </u>	_
541-73	3-1	1,3-Dichlorot	oenzene			790	<u> </u>	_
106-46	6-7	1,4-Dichlorot	oenzene			790	U	_
95-50-	-1	1,2-Dichlorot	penzene			790	U	

	VOLATILE ORGANICS ANALYSIS DATA SHEET								
		TENTAT	IVELY IDENT	IFIED COMPO	DUN	DS		9007-SE	2
Lab Name:	FMETL			NJDEP#	: <u>1</u>	3461			
Project:	Evans	Ca	se No.: <u>585</u> 2	Locat	on:	9007	SD	G No.:	
Matrix: (soil/w	vater)	SOIL	_	L	ab S	Sample I	D: <u></u>	5852.07	
Sample wt/vc	ol:	11.2	(g/ml) <u>G</u>		.ab F	ile ID:	<u>\</u>	VB008792.D	_
Level: (low/m	ned)	MED	_	C	Date	Receive	d:	11/13/00	****
% Moisture: not dec. <u>16.23</u> Date Analyzed: <u>11/15/00</u>							_		
GC Column:	RTX5	02. ID: <u>0</u> .	25 (mm)	[Dilutio	on Facto	or:	1.0	_
Soil Extract V	olume:	25000	(uL)	5	Soil A	Aliquot V	'olun	ne: <u>50</u>	(uL)
	. •			CONCENTR	a)		S:		
Number TICs	found:	0		(ug/c or ug/r	9/	<u> </u>			
CAS NO.		COMPO	JND NAME		ĺ	RT	ES	T. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET 9007-SW2 Lab Name: FMETL NJDEP#: 13461 9007-SW2 Project: Evans Case No: 5852 Location: 9007 SDG No: Matrix: (soil/water) SOIL Lab Sample DD: 5852.08		1A		FIELD ID):	
Lab Name: FMETL NJDEP#: 13461 Projact: Evans Case No.: 5552 Location: 9007 SDG No.: Matrix: (soliwater) SOIL Lab Sample ID: 5552.08 Sample wt/vol: 10.8 (g/m) G Lab Sile ID: 900793.0 Levei: (low/med) MED Date Received: 11/15/00 9/ Molsture: not dec: 9.71 Date Analyzed: 11/15/00 GC Column: RTX502, ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquet Volume: 50 (uL) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 0 107028 Acrolein 1800 U 175550 1et Hevirulent-But/ul alcohol 3400 U 163203 Di-Isoaronyl ether 520 U 75718 Diehtorontifuoromethane 1000 U 75-0-3 Chichorontifuoromethane 770 U 75-83-4 1,1-Dichicromethane	. VOL	ATILE ORGANICS ANALYS	SIS DATA SHEET	0.007		7
Project: Evans Case No.: 5852 Location: 9007 SDG No.: Matrix: (solil/water) SOIL Lab Sample ID: 5652.08 Sample wt/vol: 10.8 (g/m)) G Lab File ID: VB008793.D Level: (low/med) MED Date Received: 11/15/00 GC Column: RTX502, ID: 0.25 (nm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (ul.) Soil Aliquot Volume: 50 (ul.) CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 107028 Acrolein 1800 U 107131 Acrolein/Heite 770 U 1684044 Methyl-tr-Butyl alohol 3400 U 108202 U 75718 Dichlorodfiluoromethane 1000 U 74-87-3 Chioremethane 770 U 75-01-4 Vin/U Chioride 770 U 75-03-4 1.1-Dichloroefthene 280 U 75-03-2 U 75-03-2 U 75-03-2 U 75-03-2	Lab Name: FMETL	N	JDEP#: <u>13461</u>	9007	-5172	
Matrix: Lab Lab Sample Wt/vol: 10.8 (g/ml) G Level: (low/med) MED Date Received: 11/13/00 % Moisture: not dec. 9.71 Date Analyzed: 11/13/00 % Moisture: not dec. 9.71 Date Analyzed: 11/15/00 GC Column: RTX502. Di 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 Acroiein 1800 U 162404 Metryl-tert-Butyl alochol 3400 U 162404 Metryl-tert-Butyl alochol 3400 U 162404 Metryl-tert-Butyl alochol 3400 U 162403 Di-Isocropyl ether 770 U 174-87-3 Choromethane 770 U 75-69-4 Trichioroethane 770 U 174-87-3 Choromethane 520 U	Project: Evans	Case No.: 5852	Location: 9007	SDG No.:		
Sample wVol: 10.8 (g/ml) G Lab File ID: VB008793.D Level: (low/med) MED Date Received: 11/13/00 % Moisture: not dec. 9.71 Date Analyzed: 11/13/00 GC Column: RTX502. ID: 0.25 (mr) Dilution Factor: 1.0 Soil Extract Volume: 25000 (ul.) Soil Aliquot Volume: 50 (ul.) Soil Aliquot Volume: 25000 (ul.) Soil Aliquot Volume: 50 (ul.) Soil Aliquot Volume: 2600 (ul.) Soil Aliquot Volume: 50 (ul.) Soil Aliquot Volume: 2600 U 7070 U 107028 Aerolein 1800 U 167444 Methyl-tert-Burkl ether 770 U 770 U 7716 U 77616 U 7770 U 77518 Dichierodfluoromethane 280 U 7750.U 776.90.U 775.69.4 Tricheroethane 280 U 776.90.U 775.69.4 Tricheroethane	Matrix: (soil/water) S	 DIL	Lab Sample	- ID: 5852.08		
Sample Workit Itel Date Received Itel Level: (iow/med) MED Date Received: 11/13/00 % Moleture: not dec. 9.71 Date Analyzed: 11/13/00 % Moleture: not dec. 9.71 Date Analyzed: 11/15/00 GC Column: RTX502. D2.25 (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 Aerolein 1800 U 163404 Methyl-tert-Buhyl ether 770 U 1634044 Methyl-tert-Buhyl ether 770 U 774-87-3 Choromethane 770 U 74-87-3 Choromethane 770 U 77-69-4 11/notorfulcormethane 260 U 75-60-3 Chiloroethane 770 U 75-36-4 1,1-Dichiloroethane 520 U 75-36-5 U	Semple wt/vol: 10) 8 (a/ml) G	Lab File ID.	VB008793		-
Level: Date Absolute: Date Absolute: % Moisture: not dec. 9.71 Date Analyzed: 11/15/00 GC Column: RTX502. Di 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquet Volume: 50 (uL) Soil Aliquet Volume: 25000 (uL) Soil Aliquet Volume: 50 (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 107028 Acrolein 1800 U 175650 Q 107131 Acrolein 1800 U 175650 Q 1634044 Methyl-tert-Buyl ether 520 U 175718 Dichorodifluoromethane 1000 U 75-01-4 Vinyl Chlorodethane 770 U 174-83-9 Bromomethane 520 U 75-03-3 Chlorodethane 520 U 175-35-4 1,1-Dichorodethane 520 U 75-15-0 Carbon Disulfide 280						
% Molsture: not dec. 9.71 Date Analyzed: 11/15/00 GC Column: <u>RTX502</u> , ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000(uL) Soil Aliquet Volume: 50 (uL) Soil Extract Volume: 25000(uL) Soil Aliquet Volume: 50 (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KGQ 107028 Acrolein 1800 U 175650 tert-Butyl alcohol 3400 U 1834044 Methyl-tert-Butyl ether 770 U 75718 Dichlorodifluoromethane 1000 U 74-87-3 Chloromethane 280 U 75-93-4 Trichlorodifluoromethane 520 U 75-93-4 Trichlorodifluoromethane 280 U 75-93-4 1.1-Dichloroethane 280 U 75-93-4 1.1-Dichloroethane 280 U 75-94-1 Acetone 280 U	Level: (low/med) M	ED	Date Receive	ed: <u>11/13/00</u>	<u> </u>	
GC Column: RTX502. [D: 0.25] (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 50 (uL) 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 175650 1et-Butyl alcohol 3400 U 1634044 Methyl-tert-Butyl ether 770 U 1 108203 Di-Isopropyl ether 520 U 75718 Dichorodifluoromethane 1000 U 74:87:3 Chioromethane 770 U 75:01-4 Vinyl Choloride 770 U 75:35:4 1,1-Dichioroethene 520 U 75:35:4 1,1-Dichioroethene 520 U 75:35:4 1,1-Dichioroethene 520 U 75:35:4 1,1-Dichioroethene 520 U 75:35:4 1,2-Dichioroethene	% Moisture: not dec. 9.	71	Date Analyze	ed: <u>11/15/00</u>	····	
Soil Extract Volume: 2500(ul.) Soil Aliquet Volume: 50(ul.) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KGQ 107028 Acrolein 1800 U 107131 Acrolein 1800 U 107131 Acrolein 1800 U 103203 Disportuly lakohol 3400 U 16334044 Methy-tert-Sulvi ather 770 U 75718 Dichlorodifluoromethane 1000 U 75.01-4 Vinvi Choirde 770 U 74.83-9 Bromomethane 520 U 75.03 Chloromethane 520 U 75.69-4 Trichlorofluoromethane 520 U 75.69-4 1.1-Dichloroethene 280 U 67-64-1 Acetone 520 U 75-09-2 Methylene Chloride 850 B 166-60-5 trans-1.2-Dichloroethane 520 U 75-69-2 cis1.2-Dichloroethane 520 U 75-69-3 Chloroethane 520	GC Column: RTX502.	ID: 0.25 (mm)	Dilution Facto	or: <u>1.0</u>		
CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 107128 Acrolein 1800 U 107131 Acrolonitrile 1800 U 107131 Acrolonitrile 1800 U 1634044 Methyl-tert-Butyl alcohol 3400 U 1634023 Di-isopropyl ether 520 U 75718 Dichlorodifluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-00-3 Chloromethane 520 U 75-69-4 Trichlorofluoromethane 520 U 75-35-4 1,1-Dichloroethene 260 U 75-39-2 Methylene Chloride 850 B 166-60-5 trans-1,2-Dichloroethene 220 U 75-34-3 1,1-Dichloroethene 260 U 75-39-2 Methylene Chloride 850 B 166-60-5 trans-1,2-Dichloroethane 260 U 75-56 <t< td=""><td>Soil Extract Volume: 25</td><td>000 (uL)</td><td>Soil Aliquot V</td><td>/olume: 50</td><td> (u</td><td>L)</td></t<>	Soil Extract Volume: 25	000 (uL)	Soil Aliquot V	/olume: 50	(u	L)
CONCENTRATION UNITS: C CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 107028 Acrolein 1800 U 107131 Acrolein 1800 U 175650 Ietri-Butyl alcohol 3400 U 1834044 Methyl-tert-Butyl ethet 770 U 198203 Di-Isopropyl ether 520 U 75718 Dichiorodfluoromethane 1000 U 74-87-3 Chloromethane 520 U 75-01-4 Vinvl Chloride 770 U 75-02-3 Chloroethane 520 U 75-50-4 Trichiorofluoromethane 520 U 75-69-2 Methylene Chloride 850 B 106-60-5 Itans-1,2-Dichloroethane 520 U 75-34-3 1,1-Dichloroethane 520 U 75-34-4 Nuryl Acetate 770 U 75-34-3 1,1-Dichloroethane 260 U 198-93-3 <						_,
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 107028 Acrolein 1800 U 107131 Acrylonitrile 1800 U 75650 teri-Butyl alcohol 3400 U 1834044 Methyl-teri-Butyl alther 770 U 108203 Di-Isogropyl alther 520 U 75718 Dichlorodifluoromethane 1000 U 75-01-4 Vinyl Chloride 770 U 75-30-3 Chloromethane 520 U 75-30-3 Chloromethane 520 U 75-35-4 1,1-Dichlorogthene 520 U 75-35-4 1,1-Dichlorogthene 520 U 75-36-5 trans-1,2-Dichloroethene 520 U 75-34-3 1,1-Dichloroethane 520 U 75-34-3 1,1-Dichloroethane 520 U 75-34-3 1,1-Dichloroethane 520 U 75-34-3 1,1-Dichloroethane 520 U		CONC	CENTRATION UNIT	ſS:		
107028 Acrolein 1800 U 107131 Acryonitrile 1800 U 75650 tert-Butyl alcohol 3400 U 1034044 Methyl-tert-Butyl ether 770 U 108203 D-Hsopropyl ether 520 U 75718 Dichorodifluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-01-4 Vinvl Chloride 770 U 75-00-3 Chloroethane 720 U 75-38-4 1richlorofluoromethane 280 U 75-39-2 Methylene Chloride 280 U 75-59-2 Methylene Chloride 850 B 156-60-5 trans-1,2-Dichloroethene 520 U 75-34-3 1,1-Dichloroethane 1200 1 166-59-2 cis-1,2-Dichloroethane 260 U 71-55-6 1,1,1-frichloroethane 260 U 71-55-6 1,1,1-frichloroethane 260 U <t< td=""><td>CAS NO.</td><td>COMPOUND (ug/L</td><td>or ug/Kg) UG/ł</td><td>KG</td><td>Q</td><td></td></t<>	CAS NO.	COMPOUND (ug/L	or ug/Kg) UG/ł	KG	Q	
107028 Acrylonitrile 1800 U 107131 Acrylonitrile 1800 U 1634044 Methyl-ter-Butyl altochol 3400 U 1634044 Methyl-ter-Butyl altochol 3400 U 1634044 Methyl-ter-Butyl altor 770 U 108203 Di-Isopropyl altor 520 U 75718 Dichlorodifluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-01-4 Vinyl Chloride 770 U 75-02-3 Chloromethane 520 U 75-59-4 Trichlorofluoromethane 520 U 75-35-4 1.1-Dichloroethane 520 U 75-36-2 Methylene Chloride 850 B 156-60-5 trans-1,2-Dichloroethane 260 U 75-33-3 2-Butanone 1200 166-59-2 0is-1,2-Dichloroethane 260 U 71-55-6 1,1,1-Trichloroethane 260 U 17-55-6 1,1						
107131 Acrylonitrile 1800 U 75650 terl-Butyl alcohol 3400 U 103203 Di-Isopropyl ether 770 U 108203 Di-Isopropyl ether 520 U 75718 Dichlorodifluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-01-4 Vinyl Chloride 770 U 74-83-9 Bromomethane 520 U 75-00-3 Chloroethane 770 U 75-69-4 Trichlorofluoromethane 520 U 75-53-4 1,1-Dichloroethene 260 U 75-15-0 Carbon Disulfide 280 U 75-33-3 1,1-Dichloroethene 520 U 75-34-3 1,1-Dichloroethene 260 U 108-05-4 Vinyl Acetate 770 U 75-33-3 2-Butanone 1200 156-59-2 156-59-2 cis-1,2-Dichloroethene 260 U 108-	107028	Acrolein		1800	U	
75650 ter-Butyl alconol 3400 U 1630444 Methyl-tert-Butyl alter 770 U 108203 Di-Isopropyl ether 520 U 75718 Dichlorodfiluoromethane 1000 U 74-87-3 Chloromethane 260 U 75.01-4 Vinyl Chloride 770 U 74-83-9 Bromomethane 770 U 75-00-3 Chloromethane 770 U 75-35-4 1.1-Dichlorothere 220 U 75-35-4 1.1-Dichlorothere 220 U 75-35-4 1.1-Dichlorothere 220 U 75-35-4 1.1-Dichlorothere 220 U 75-35-5 Cathon Disulfide 260 U 75-34-3 1.1-Dichlorothane 220 U 75-34-3 1.1-Dichlorothane 260 U 75-34-3 1.1-Dichlorothane 260 U 76-33-3 2-Butanone 120 120 76-66-3 Chloroform 260 U 71-55-6 1.2-Dichloro	107131	Acrylonitrile		1800	<u> </u>	
1634044 Methyleter-bulk ener 7/0 0 108203 Di-isoropyl ether 520 U 75718 Dichlorodfluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-01-4 Vinyl Choride 770 U 74-83-9 Bromomethane 520 U 75-00-3 Chloroethane 770 U 75-69-4 Trichlorofluoromethane 520 U 75-69-4 Trichloroethene 520 U 75-15-0 Carbon Disulfide 260 U 75-35-4 1,1-Dichloroethene 520 U 75-34-3 1,1-Dichloroethane 260 U 75-34-3 1,1-Dichloroethane 260 U 75-69-2 cis-1,2-Dichloroethane 260 U 75-69-2 cis-1,2-Dichloroethane 260 U 76-63-3 Chloroform 260 U 71-43-2 Benzene 260 U 71-43-2	75650	tert-Butyl alcohol		3400	<u> </u>	
102203 Diskoprogram 75718 Dicklorodifluoromethane 1000 U 74-87-3 Chloromethane 260 U 75-01-4 Vinyl Chloride 770 U 74-83-9 Bromomethane 520 U 75-00-3 Chloroethane 770 U 75-69-4 Trichlorofluoromethane 520 U 75-35-4 1,1-Dichloroethene 280 U 75-15-0 Carbon Disulfide 280 U 75-15-0 Carbon Disulfide 280 U 75-34-3 1,1-Dichloroethene 520 U 75-34-3 1,1-Dichloroethene 280 U 108-65-2 cis-1,2-Dichloroethene 280 U 165-60-5 trans-1,2-Dichloroethene 280 U 165-60-2 cis-1,2-Dichloroethene 280 U 166-59-2 cis-1,2-Dichloroethene 280 U 167-56-6 1,1,1-Trichloroethane 280 U 167-56	1634044	Di jeepropul ether		<u> </u>	11	
73/10 District of the second sec	75719	Dichlorodifluoromethane		1000	<u> </u>	
17401 Unit Chloride 70 U 75-01-4 Vinyi Chloride 770 U 75-00-3 Chloroethane 770 U 75-00-3 Chloroethane 770 U 75-00-3 Chloroethane 770 U 75-01-4 Trichlorofluoromethane 520 U 75-35-4 1,1-Dichloroethene 260 U 67-64-1 Acetone 520 U 75-15-0 Carbon Disulfide 260 U 75-92 Methylene Chloride 850 B 156-60-5 trans-1,2-Dichloroethene 520 U 75-34-3 1,1-Dichloroethane 260 U 108-05-4 Vinyl Acetate 770 U 78-83-3 2-Butanone 1200 166-59-2 cis-1,2-Dichloroethene 260 U 71-65-6 1,1,1-Trichloroethane 260 U 17-55-6 1,1,1-Trichloroethane 260 U 71-43-2 Benzene 260 U 107-06-2 1,2-Dichloropropane 260 U 75-	75/10	Chloromethane		260	<u> </u>	
74-83-9 Bromomethane 520 U 75-00-3 Chloroethane 770 U 75-69-4 Trichlorofluoromethane 520 U 75-35-4 1,1-Dichloroethene 260 U 75-35-4 1,1-Dichloroethene 260 U 75-35-4 Acetone 520 U 75-35-0 Carbon Disulfide 260 U 75-35-1 Acetone 520 U 75-35-2 Methylene Chloride 850 B 156-60-5 trans-1,2-Dichloroethene 520 U 75-34-3 1,1-Dichloroethane 260 U 78-93-3 2-Butanone 1200 166-59-2 156-59-2 cis-1,2-Dichloroethene 260 U 71-43-2 Bergene 260 U 71-55-6 1,1,1-Trichloroethane 520 U 71-43-2 Bergene 260 U 76-23-5 Carbon Tetrachloride 520 U 78-67-5	75-01-4	Vinvl Chloride		770	Ŭ	
75-00-3 Chloroethane 770 U 75-69-4 Trichlorofluoromethane 520 U 75-35-4 1,1-Dichloroethene 260 U 67-64-1 Acetone 520 U 75-35-0 Carbon Disulfide 260 U 75-09-2 Methylene Chloride 850 B 156-60-5 trans-1,2-Dichloroethane 520 U 75-34-3 1,1-Dichloroethane 260 U 108-05-4 Vinyl Acetate 770 U 78-93-3 2-Butanone 1200 166-59-2 156-6 1,1,1-Trichloroethane 260 U 165-92 cis-1,2-Dichloroethane 260 U 17-55-6 1,1,1-Trichloroethane 260 U 71-43-2 Benzene 260 U 107-06-2 1,2-Dichloroethane 260 U 107-06-2 1,2-Dichloroethane 260 U 75-27-4 Bromodichloromethane 260 U 10-75-8 2-Chloroethyl vinyl ether 520 U 10-	74-83-9	Bromomethane		520	U	
75-69-4 Trichlorofluoromethane 520 U $75-35-4$ $1,1$ -Dichloroethene 260 U $67-64-1$ Acetone 520 U $75-15-0$ Carbon Disulfide 260 U $75-09-2$ Methylene Chloride 850 B $156-60-5$ trans- $1,2$ -Dichloroethene 520 U $75-34-3$ $1,1$ -Dichloroethane 260 U $108-05-4$ Vinyl Acetate 770 U $108-05-4$ Vinyl Acetate 770 U $156-59-2$ cis- $1,2$ -Dichloroethene 260 U $166-59-2$ cis- $1,2$ -Dichloroethene 260 U $71-55-6$ $1,1,1$ -Trichloroethane 260 U $71-43-2$ Benzene 260 U $107-06-2$ $1,2$ -Dichloropthane 520 U $78-75$ $1,2$ -Dichloropthane 260 U $78-7-4$ Bromodichloromethane 260 U $100-75-8$ 2	75-00-3	Chloroethane	_	770	U	
75-35-4 1,1-Dichloroethene 260 U $67-64-1$ Acetone 520 U $75-15-0$ Carbon Disulfide 260 U $75-09-2$ Methylene Chloride 850 B $156-60-5$ trans-1,2-Dichloroethene 520 U $75-34-3$ 1,1-Dichloroethane 260 U $108-05-4$ Vinyl Acetate 770 U $78-93-3$ 2-Butanone 1200 1 $156-59-2$ cis-1,2-Dichloroethene 260 U $17-65-3$ Chloroform 260 U $71-55-6$ 1,1,1-Trichloroethane 260 U $71-43-2$ Benzene 260 U $107-06-2$ 1,2-Dichloroethane 260 U $107-06-2$ 1,2-Dichloroethane 260 U $78-87-5$ 1,2-Dichloropropane 260 U $78-87-5$ 1,2-Dichloropropene 260 U $1007-15$ cis-1,3-Dichloropropene	75-69-4	Trichlorofluoromethane		520	<u> </u>	
67-64-1 Acetone 520 U $75-15-0$ Carbon Disulfide 260 U $75-09-2$ Methylene Chloride 850 B $156-60-5$ trans-1,2-Dichloroethene 520 U $75-34-3$ 1,1-Dichloroethane 260 U $108-05-4$ Vinvl Acetate 770 U $78-93-3$ 2-Butanone 1200 166-59-2 $156-59-2$ cis-1,2-Dichloroethene 260 U $156-59-2$ cis-1,2-Dichloroethene 260 U $71-55-6$ 1,1.1-Trichloroethane 260 U $71-55-6$ 1,1.1-Trichloroethane 260 U $107-06-2$ 1,2-Dichloroethane 260 U $107-06-2$ 1,2-Dichloroethane 260 U $75-27-4$ Bromodichloromethane 260 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $10061-02-6$ trans-1,3-Dich	75-35-4	1,1-Dichloroethene		260	<u> </u>	
75.15-0 Carbon Disulfide 260 U $75.09-2$ Methylene Chloride 850 B $156-60-5$ trans-1,2-Dichloroethene 520 U $75.34.3$ 1,1-Dichloroethane 260 U $108-05-4$ Vinyl Acetate 770 U $78-93.3$ 2-Butanone 1200 166-59-2 $156-59-2$ cis-1,2-Dichloroethene 260 U $67-66-3$ Chloroform 260 U $71-55-6$ 1,1-Trichloroethane 260 U $71-55-6$ 1,1-Trichloroethane 260 U $71-43-2$ Benzene 260 U $76-6-2.5$ Carbon Tetrachloride 520 U $71-43-2$ Benzene 260 U $76-27-4$ Bromodichloromethane 260 U $75-27-4$ Bromodichloromethane 260 U $75-27-4$ Bromodichloropropene 260 U $10-75-8$ 2-Chloroethyl vinyl ether 520 U $10061-01-5$ cis-1,3-Dichloropropene 260	<u>67-64-1</u>	Acetone		520	<u> U </u>	
75-09-2 Methylene Chloride 850 B $156-60-5$ trans-1,2-Dichloroethene 520 U $75-34-3$ 1,1-Dichloroethane 260 U $108-05-4$ Vinyl Acetate 770 U $78-93-3$ 2-Butanone 1200 1 $156-59-2$ cis-1,2-Dichloroethene 260 U $67-66-3$ Chloroform 260 U $71-55-6$ 1,1,1-Trichloroethane 260 U $71-43-2$ Benzene 260 U $70-06-2$ 1,2-Dichloroethane 520 U $70-06-2$ 1,2-Dichloroethane 520 U $76-75-4$ Benzene 260 U $76-75-4$ Beromodichloromethane 260 U $75-27-4$ Bromodichloropropane 260 U $75-27-4$ Bromodichloropropene 260 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $10061-02-6$ trans-1,3-Dichloropropene 520 U $10061-02-6$ trans-1,3-Dichl	75-15-0	Carbon Disulfide		260	<u> </u>	
156-60-5 trans-1,2-Dichloroethane 520 0 75-34-3 1,1-Dichloroethane 260 U 108-05-4 Vinyl Acetate 770 U 78-93-3 2-Butanone 1200 156-59-2 156-59-2 cis-1,2-Dichloroethene 260 U 67-66-3 Chloroform 260 U 71-55-6 1,1,1-Trichloroethane 260 U 56-23-5 Carbon Tetrachloride 520 U 71-43-2 Benzene 260 U 107-06-2 1,2-Dichloroethane 520 U 79-01-6 Trichloroethene 260 U 75-27-4 Bromodichloromethane 260 U 10061-01-5 cis-1,3-Dichloropropane 260 U 10061-01-5 cis-1,3-Dichloropropene 260 U 10061-01-5 cis-1,3-Dichloropropene 260 U 10061-02-6 trans-1,3-Dichloropropene 520 U 10061-02-6 trans-1,3-Dichloropropene 520	75-09-2	Methylene Chloride		850	<u> </u>	
75-34-3 $1,1-00010000000000000000000000000000000$	156-60-5	trans-1,2-Dichloroethene		260		
108-03-4 1017 Note are 1200 $78-93-3$ 2 -Butanone 1200 $156-59-2$ $cis-1,2-Dichloroethene$ 260 $67-66-3$ Chloroform 260 $71-55-6$ $1,1,1$ -Trichloroethane 260 $107-06-2$ $1,2$ -Dichloroethane 520 $107-06-2$ $1,2$ -Dichloroptopane 260 $10061-01-5$ $cis-1,3$ -Dichloroptopene 220 $108-88-3$ Toluene 260 $10061-02-6$ trans-1,3-Dichloroptopene 520 $10061-02-6$ trans-1,3-Dichloroptopene 520 $107-10-5$ $1,1,2$ -Trichloroethane 520 $107-10-5$ $1,1,2$ -Trichloroethane 520 $107-10-5$ $1,1,2$ -Trichloroethane 520 $107-10-5$ $1,1,2$ -Trichloroethane 520 $107-10-5$ $1,1,2$ -T	109.05.4	Vinul Acotate		770		
156-59-2 2.5014 for 1.2 -Dichloroethene 260 U $67-66-3$ Chloroform 260 U $71-55-6$ $1, 1, 1$ -Trichloroethane 260 U $56-23-5$ Carbon Tetrachloride 520 U $71-43-2$ Benzene 260 U $107-06-2$ $1, 2$ -Dichloroethane 520 U $79-01-6$ Trichloroethene 260 U $78-87-5$ $1, 2$ -Dichloropropane 260 U $76-27-4$ Bromodichloromethane 260 U $75-27-4$ Bromodichloromethane 260 U $100-75-8$ 2 -Chloroethyl vinyl ether 520 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $108-88-3$ Toluene 260 U $10061-02-6$ trans-1,3-Dichloropropene 520 U $10061-02-6$ trans-1,3-Dichloropropene 520 U $100-1$ 4 -Methyl-2-Pentanone 520 U $100-1$ 4 -Methyl-2-Orothane 520 U	78-93-3	2-Butanone		1200		
100 11,1-Trichloroethane 260 U 71-55-6 1,1,1-Trichloroethane 260 U 56-23-5 Carbon Tetrachloride 520 U 71-43-2 Benzene 260 U 107-06-2 1,2-Dichloroethane 520 U 79-01-6 Trichloroethane 520 U 78-87-5 1,2-Dichloropropane 260 U 75-27-4 Bromodichloromethane 260 U 10061-01-5 cis-1,3-Dichloropropene 260 U 108-10-1 4-Methyl-2-Pentanone 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 127-18-4 Tetrachloroethane 520 U 127-18-4 Tetrachloroethane 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 520	156-59-2	cis-1.2-Dichloroethene		260	U	
71-55-6 1,1,1-Trichloroethane 260 U 56-23-5 Carbon Tetrachloride 520 U 71-43-2 Benzene 260 U 107-06-2 1,2-Dichloroethane 520 U 79-01-6 Trichloroethene 260 U 78-87-5 1,2-Dichloropropane 260 U 75-27-4 Bromodichloromethane 260 U 10061-01-5 cis-1,3-Dichloropropene 260 U 108-10-1 4-Methyl-2-Pentanone 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 127-18-4 Tetrachloroethane 520 U 127-18-4 Tetrachloroethane 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene <td< td=""><td>67-66-3</td><td>Chloroform</td><td></td><td>260</td><td>U</td><td></td></td<>	67-66-3	Chloroform		260	U	
56-23-5Carbon Tetrachloride 520 U $71-43-2$ Benzene 260 U $107-06-2$ $1,2$ -Dichloroethane 520 U $79-01-6$ Trichloroethane 260 U $78-87-5$ $1,2$ -Dichloropropane 260 U $75-27-4$ Bromodichloromethane 260 U $110-75-8$ 2 -Chloroethyl vinyl ether 520 U $10061-01-5$ cis- $1,3$ -Dichloropropene 260 U $108-80-3$ Toluene 260 U $1068-02-6$ trans- $1,3$ -Dichloropropene 520 U $10061-02-6$ trans- $1,3$ -Dichloropropene 520 U $127-18-4$ Tetrachloroethane 520 U $127-18-4$ Tetrachloroethene 260 U $124-48-1$ Dibromochloromethane 520 U $108-90-7$ Chlorobenzene 260 U $102-41-4$ Ethylbenzene 520 U	71-55-6	1,1,1-Trichloroethane		260	<u> </u>	
71-43-2Benzene 260 U $107-06-2$ 1,2-Dichloroethane 520 U $79-01-6$ Trichloroethene 260 U $78-87-5$ 1,2-Dichloropropane 260 U $75-27-4$ Bromodichloromethane 260 U $110-75-8$ 2-Chloroethyl vinyl ether 520 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $108-10-1$ 4-Methyl-2-Pentanone 520 U $108-88-3$ Toluene 260 U $10061-02-6$ trans-1,3-Dichloropropene 520 U $127-18-4$ Tetrachloroethane 520 U $127-18-4$ Tetrachloroethene 520 U $591-78-6$ 2-Hexanone 520 U $124-48-1$ Dibromochloromethane 520 U $108-90-7$ Chlorobenzene 260 U $100-41-4$ Ethylbenzene 520 U	56-23-5	Carbon Tetrachloride		520	U	
107-06-21,2-Dichloroethane 520 U79-01-6Trichloroethene 260 U78-87-51,2-Dichloropropane 260 U75-27-4Bromodichloromethane 260 U110-75-82-Chloroethyl vinyl ether 520 U10061-01-5cis-1,3-Dichloropropene 260 U108-10-14-Methyl-2-Pentanone 520 U108-88-3Toluene 260 U10061-02-6trans-1,3-Dichloropropene 520 U10061-02-6trans-1,3-Dichloropropene 520 U127-18-4Tetrachloroethane 520 U127-18-4Tetrachloroethene 520 U124-48-1Dibromochloromethane 520 U108-90-7Chlorobenzene 260 U100-41.4Ethylhenzene 520 U	71-43-2	Benzene		260	<u> </u>	
79-01-6 Trichloroethene 260 U 78-87-5 1,2-Dichloropropane 260 U 75-27-4 Bromodichloromethane 260 U 110-75-8 2-Chloroethyl vinyl ether 520 U 10061-01-5 cis-1,3-Dichloropropene 260 U 108-10-1 4-Methyl-2-Pentanone 520 U 108-88-3 Toluene 260 U 10061-02-6 trans-1,3-Dichloropropene 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 127-18-4 Tetrachloroethane 520 U 127-18-4 Tetrachloroethane 520 U 124-48-1 Dibromochloromethane 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100-41-4 Ethylkenzene 520 U	107-06-2	1,2-Dichloroethane		520	<u> </u>	
78-87-51,2-Dichloropropane2600 $75-27-4$ Bromodichloromethane260U $110-75-8$ 2-Chloroethyl vinyl ether520U $10061-01-5$ cis-1,3-Dichloropropene260U $108-10-1$ 4-Methyl-2-Pentanone520U $108-88-3$ Toluene260U $10061-02-6$ trans-1,3-Dichloropropene520U $79-00-5$ 1,1,2-Trichloroethane520U $127-18-4$ Tetrachloroethene260U $591-78-6$ 2-Hexanone520U $124-48-1$ Dibromochloromethane520U $108-90-7$ Chlorobenzene260U $100-41.4$ Ethylbenzene520U	79-01-6			260	<u> </u>	
75-27-4Bioinformation biointentiate 200 0 $110-75-8$ 2 -Chloroethyl vinyl ether 520 U $10061-01-5$ cis-1,3-Dichloropropene 260 U $108-10-1$ 4 -Methyl-2-Pentanone 520 U $108-88-3$ Toluene 260 U $10061-02-6$ trans-1,3-Dichloropropene 520 U $79-00-5$ $1,1,2$ -Trichloroethane 520 U $127-18-4$ Tetrachloroethene 260 U $591-78-6$ 2 -Hexanone 520 U $124-48-1$ Dibromochloromethane 520 U $108-90-7$ Chlorobenzene 260 U $100-41.4$ Ethylbenzene 520 U	/8-87-5	Promodiobloromothano		260	<u> </u>	
110-73-8 2-Ontobertyr wry enter 020 0 10061-01-5 cis-1,3-Dichloropropene 260 U 108-10-1 4-Methyl-2-Pentanone 520 U 108-88-3 Toluene 260 U 10061-02-6 trans-1,3-Dichloropropene 520 U 10061-02-6 trans-1,3-Dichloropropene 520 U 127-18-4 Tetrachloroethane 520 U 127-18-4 Tetrachloroethane 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100-14 Ethylbenzene 520 U	110 75 9	2-Chloroethyl vinyl ether		<u> </u>	<u> </u>	
10001 01 0 010 110 Distribution property 100 108-10-1 4-Methyl-2-Pentanone 520 U 108-88-3 Toluene 260 U 10061-02-6 trans-1,3-Dichloropropene 520 U 79-00-5 1,1,2-Trichloroethane 520 U 127-18-4 Tetrachloroethene 260 U 591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100-41.4 Ethylbenzene 520 U	10061-01-5	cis-1 3-Dichloropropene		260	<u> </u>	
108-88-3 Toluene 260 U 10061-02-6 trans-1,3-Dichloropropene 520 U 79-00-5 1,1,2-Trichloroethane 520 U 127-18-4 Tetrachloroethene 260 U 591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100.41.4 Etbulbenzene 520 U	108-10-1	4-Methyl-2-Pentanone		520	U	
10061-02-6 trans-1,3-Dichloropropene 520 U 79-00-5 1,1,2-Trichloroethane 520 U 127-18-4 Tetrachloroethene 260 U 591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U	108-88-3	Toluene		260	U	
79-00-5 1,1,2-Trichloroethane 520 U 127-18-4 Tetrachloroethene 260 U 591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100-41.4 Ethylbenzene 520 U	10061-02-6	trans-1,3-Dichloropropen	e		· · U ·	
127-18-4 Tetrachloroethene 260 U 591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100.41.4 Etbylbenzene 520 U	79-00-5	1,1,2-Trichloroethane		520	<u> U</u>	
591-78-6 2-Hexanone 520 U 124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100-41.4 Etbylbenzene 520 U	127-18-4	Tetrachloroethene		260	<u> </u>	
124-48-1 Dibromochloromethane 520 U 108-90-7 Chlorobenzene 260 U 100.41.4 Etbylbenzene 520 U	591-78-6	2-Hexanone	<u>-</u>	520		1
108-90-7 Chlorobenzene 200 0	124-48-1	Ulbromochloromethane		520		
	108-90-7	Ethylbenzene		<u></u> 520	U U	

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			1A			FIELD II	D:	
	VC	LATILE ORGANI	CS ANA	LYSIS DATA SH	IEET	900	7-SW2	
Lab Name:	FMETL				3461			
Project:	Evans	Case No.:	5852	Location:	9007 SI	DG No.: _		
Matrix: (soil/v	water) <u>S</u>	SOIL		Lab S	ample ID:	5852.08		
Sample wt/vo	ol: <u>1</u>	0.8 (g/ml)	G	Lab F	ile ID:	VB008793	3.D	
Level: (low/r	ned) <u>N</u>	MED		Date I	Received:	11/13/00		
% Moisture:	not dec. 9).71		Date /	Analyzed:	11/15/00		
GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0								
Soil Extract \	/olume: 2	5000 (uL)		Soil A	liquot Volu	me: <u>50</u>		(uL)
			CC	ONCENTRATIO	N UNITS:			
CAS NO) .	COMPOUND	(บุ	g/L or ug/Kg)	UG/KG		Q	
00-00-	·0	m+p-Xylenes				770	U]
95-47-	-6	o-Xylene				520	U	
100-42	2-5	Styrene				520	U	
75-25-	·2	Bromoform				520	U	
79-34-	•5	<u>1,1,2,2-Tetrac</u>	hloroeth	iane		520	U	_
541-7	3-1	1,3-Dichlorob	enzene			770	U	
106-46	<u>3-7</u>	1,4-Dichlorob	enzene			770	U	
95-50	·1	1,2-Dichlorob	enzene			770	U]

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	١	VOLATIL	1E E ORGANICS /	ANALYSIS DA	TA SHEET		FIELD ID:	
		TENTATIVELY IDENTIFIED COMPOUNDS					9007-SW	2
Lab Name:	FMETL			NJDEP	#: <u>13461</u>			
Project:	Evans		Case No.: 5852	2Locat	ion: <u>9007</u>	S	DG No.:	
Matrix: (soil/v	vater)	SOIL		I	_ab Sample	D:	5852.08	
Sample wt/vo	ol:	10.8	(g/ml) <u>G</u>		_ab File ID:		VB008793.D	_
Level: (low/n	ned)	MED		i	Date Receiv	ved:	11/13/00	
% Moisture: r	not dec.	9.71		i	Date Analyz	zed:	11/15/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	ļ	Dilution Fac	tor:	1.0	
Soil Extract V	/olume:	25000	(uL)	:	Soil Aliquot	Volu	me: <u>50</u>	(uL)
						ITS:		
Number TICs	found:	0		(ug/L of ug/r	(y) (Ga	/NG		
CAS NO.		COMF	OUND NAME		RT	ES	ST. CONC.	Q

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	1A	FIELD ID:
١	/OLATILE ORGANICS ANALYSIS DATA SHE	ET DOOT OWO
Lab Name: FMETL	NJDEP#: 1346	9007-SW3
Project: Evans	Case No.: 5852 Location: 90	07 SDG No.:
Matrix: (soil/water)		
Sample wt/vol:	<u>11.1 (g/ml) G</u> Lab File	ID: <u>VB008794.D</u>
Level: (low/med)	MED Date Rev	ceived: 11/13/00
% Moisture: not dec.	10.7 Date And	alyzed: <u>11/15/00</u>
GC Column: RTX5	02. ID: 0.25 (mm) Dilution	Factor: 1.0
Soil Extract Volume:		uot Volume: <u>50</u> (uL)
	CONCENTRATION	UNITS:
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG Q
	Acualain	1900
107028		
10/131		
75650	Mathyl tert Butyl athor	
1034044		510 11
75719	Di-Isopropyr etiter	
70/10	Chloromethane	250 U
75-01-4	Vinvl Chloride	760 U
71-83-9	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	990 B
156-60-5	trans-1,2-Dichloroethene	510 U
75-34-3	1,1-Dichloroethane	250 U
108-05-4	Vinyl Acetate	760 U
78-93-3	2-Butanone	1200
156-59-2	cis-1,2-Dichloroethene	250 U
67-66-3	Chloroform	250 U
71-55-6	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	<u>510 U</u>
79-01 - 6	Trichloroethene	250 U
78-87-5	1,2-Dichloropropane	250 U
75-27-4	Bromodichloromethane	<u>250 U</u>
<u>110-75-8</u>	2-Chloroethyl vinyl ether	<u>510 U</u>
<u>10061-01-5</u>	cis-1,3-Dichloropropene	<u>250 U</u>
108-10-1	4-Methyl-2-Pentanone	
108-88-3		
10061-02-6	trans-1,3-Dichloropropene	
79-00-5	1,1,2-I richloroethane	
127-18-4		
591-78-6		
124-48-1	Dibromocnioromethane	
108-90-7		
100-41-4	Einyidenzene	<u> </u>

			1A			FIELD I	כ:	
	` vo	SHEET	000					
Lab Name:	FMETL			NJDEP#:	13461	900		
Project:	Evans	Case No.: 5	5852	Locatior	n: <u>9007</u> S	DG No.:		
Matrix: (soil/	water)	SOIL		Lat	Sample ID:	5852.10		
Sample wt/v	ol:	11.1 (g/ml)	G	Lat	o File ID:	VB008794	4.D	
Level: (low/	med)	MED		Da	te Received:	11/13/00		
% Moisture:	not dec.	10.7		Da	te Analyzed:	11/15/00		
GC Column:	RTX50	2. ID: 0.25 (mr	m)	Dilu	ution Factor:	1.0		
Soil Extract	Volume: 2	25000 (uL)		Soi	I Aliquot Volu	me: <u>50</u>		(uL)
			CON					
CAS NO	Э.	COMPOUND	(ug/l	L or ug/Kg)	UG/KG		Q	
00-00	-0	m+p-Xvienes	-			760	U	
95-47	-6	o-Xylene				510	U	
100-4	2-5	Styrene				510	U	
75-25	-2	Bromoform				510	U	
79-34	-5	1,1,2,2-Tetracl	hloroetha	ne		510	<u> </u>	
541-7	3-1	1,3-Dichlorobe	enzene			760	<u> </u>	
106-4	6-7	1,4-Dichlorobe	enzene			760	U	
95-50	-1	1.2-Dichlorobe	nzene			760	U	

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	١	/OLATI	1E LE ORGANICS A	NALYSIS DA	TA SHEET		FIELD ID:	
		TENT	ATIVELY IDENT	IFIED COMP	DUNDS		0007.81	Mo
Lab Name:	FMETL			NJDEP#	t: <u>13461</u>		5007-31	
Project:	Evans		Case No.: 5852	2 Locat	ion: <u>9007</u>	SE)G No.:	
Matrix: (soil/w	vater)	SOIL		L	ab Sample	ID:	5852.10	
Sample wt/vo	ol:	<u>11.1</u>	(g/ml) <u>G</u>	L	ab File ID:		VB008794.D	
Level: (low/m	ned)	MED		Date Received: 11/13/00				
% Moisture: r	not dec.	10.7		E	Date Analyz	ed:	11/15/00	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	Γ	Dilution Fac	tor:	1.0	
Soil Extract V	/olume:	25000	(uL)	ç	Soil Aliquot	Volur	me: <u>50</u>	(uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG								
Number TICs	s tound:	0						·····
CAS NO.		СОМ	POUND NAME		RT	ES	T. CONC.	Q

Client :	U.S. Army	Lab. ID # :	PBLK625
	DPW. SELFM-PW-EV	Date Rec'd:	
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	
Matrix:	Soil		
Analyst:	T. Frankovich	Field ID:	

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	· 1	100.00	0.0112	ND	0.49	10.00
Arochlor 1221	1	100.00	0.0206	ND	0.49	10.00
Arochlor 1232	1	100.00	0.0140	ND	0.49	10.00
Arochlor 1242	1	100.00	0.0160	ND	0.49	10.00
Arochlor 1248	1	100.00	0.0064	ND	0.49	10.00
Arochlor 1254	1	100.00	0.0040	ND	0.49	10.00
Arochlor 1260	1	100.00	0.0036	ND	0.49	10.00

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.01
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-EPS1

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	89.94	0.0115	ND	0.49	10.79
Arochlor 1221	1	89.94	0.0212	ND	0.49	10.79
Arochlor 1232	1	89.94	0.0144	ND	0.49	10.79
Arochlor 1242	1	89.94	0.0165	ND	0.49	10.79
Arochlor 1248	1	89.94	0.0066	ND	0.49	10.79
Arochlor 1254	1	89.94	0.0041	ND	0.49	10.79
Arochlor 1260	1	89.94	0.0037	0.190	0.49	10.79

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.02
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-В6

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	82.45	0.0145	ND	0.49	9.39
Arochlor 1221	1	82.45	0.0266	ND	0.49	9.39
Arochlor 1232	1	82.45	0.0181	ND	0.49	9.39
Arochlor 1242	1	82.45	0.0207	ND	0.49	9.39
Arochlor 1248	1	82.45	0.0083	ND	0.49	9.39
Arochlor 1254	1	82.45	0.0052	ND	0.49	9.39
Arochlor 1260	1	82.45	0.0046	ND	0.49	9.39

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmlD/.25um Rtx-1701 30m/.32mmlD/.25um

Client :	U.S. Army	Lab. ID # :	5852.03
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-NW1

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	87.52	0.0126	ND	0.49	10.12
Arochlor 1221	1	87.52	0.0233	ND	0.49	10.12
Arochlor 1232	1	87.52	0.0158	ND	0.49	10.12
Arochlor 1242	1	87.52	0.0181	ND	0.49	10.12
Arochlor 1248	1	87.52	0.0072	ND	0.49	10.12
Arochlor 1254	1	87.52	0.0045	ND	0.49	10.12
Arochlor 1260	1	87.52	0.0041	ND	0.49	10.12

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

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Client :	U.S. Army	Lab. ID # :	5852.04
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-SW1

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	90.81	0.0116	ND	0.49	10.63
Arochlor 1221	1	90.81	0.0213	ND	0.49	10.63
Arochlor 1232	1	90.81	0.0145	ND	0.49	10.63
Arochlor 1242	1	90.81	0.0166	ND	0.49	10.63
Arochlor 1248	1	90.81	0.0066	ND	0.49	10.63
Arochlor 1254	1	90.81	0.0041	ND	0.49	10.63
Arochlor 1260	1	90.81	0.0037	ND	0.49	10.63

ND = Not Detected MDL = Method Detection Limit

Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.05
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-NE1

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	88.60	0.0121	ND	0.49	10.47
Arochlor 1221	1	88.60	0.0222	ND	0.49	10.47
Arochlor 1232	1	88.60	0.0151	ND	0.49	10.47
Arochlor 1242	1	88.60	0.0172	ND	0.49	10.47
Arochlor 1248	1	88.60	0.0069	ND	0.49	10.47
Arochlor 1254	1	88.60	0.0043	ND	0.49	10.47
Arochlor 1260	1	88.60	0.0039	ND	0.49	10.47

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.06
•	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	. 11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-SE1

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	87.87	0.0117	ND	0.49	10.94
Arochlor 1221	1	87.87	0.0214	ND	0.49	10.94
Arochlor 1232	1	87.87	0.0146	ND	0.49	10.94
Arochlor 1242	1	87.87	0.0166	ND	0.49	10.94
Arochlor 1248	1	87.87	0.0067	ND	0.49	10.94
Arochlor 1254	1	87.87	0.0042	ND	0.49	10.94
Arochlor 1260	1	87.87	0.0037	ND	0.49	10.94

.

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army DPW. SELFM-PW-EV	Lab. ID # : Date Rec'd:	5852.07 11/13/00
	Bldg. 173 Ft. Monmouth, NJ 07703	Extraction Date: Analysis Date:	11/14/00
Analysis: Matrix:	SW-846 Method 8082	Location :	Building 9007 UST Project
Analyst:	T. Frankovich	Field ID:	9007-SE2

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	83.77	0.0124	ND	0.49	10.75
Arochlor 1221	1	83.77	0.0229	ND	0.49	10.75
Arochlor 1232	1	83.77	0.0155	ND	0.49	10.75
Arochlor 1242	1	83.77	0.0178	ND	0.49	10.75
Arochlor 1248	1	83.77	0.0071	ND	0.49	10.75
Arochlor 1254	1	83.77	0.0044	ND	0.49	10.75
Arochlor 1260	1	83.77	0.0040	ND	0.49	10.75

ND = Not Detected MDL = Method Detection Limit

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Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.08
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-SW2

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	90.29	0.0119	ND	0.49	10.40
Arochlor 1221	1	90.29	0.0219	ND	0.49	10.40
Arochlor 1232	1	90.29	0.0149	ND	0.49	10.40
Arochlor 1242	1	90.29	0.0170	ND	0.49	10.40
Arochlor 1248	1	90.29	0.0068	ND	0.49	10.40
Arochlor 1254	1	90.29	0.0043	ND	0.49	10.40
Arochlor 1260	1	90.29	0.0038	ND	0.49	10.40

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.09
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis: Matrix: Analyst:	SW-846 Method 8082 Soil T. Frankovich	Location : Field ID:	Building 9007 UST Project 9007-OBS2

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	. 1	91.49	0.0114	ND	0.49	10.75
Arochlor 1221	1	91.49	0.0209	ND	0.49	10.75
Arochlor 1232	1	91.49	0.0142	ND	0.49	10.75
Arochlor 1242	1	91.49	0.0163	ND	0.49	10.75
Arochlor 1248	1	91.49	0.0065	ND	0.49	10.75
Arochlor 1254	1	91.49	0.0041	ND	0.49	10.75
Arochlor 1260	1	91.49	0.0037	ND	0.49	10.75

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client :	U.S. Army	Lab. ID # :	5852.10
	DPW. SELFM-PW-EV	Date Rec'd:	11/13/00
	Bldg. 173	Extraction Date:	11/14/00
	Ft. Monmouth, NJ 07703	Analysis Date:	11/14/00
Analysis:	SW-846 Method 8082	Location :	Building 9007
Matrix:	Soil		UST Project
Analyst:	T. Frankovich	Field ID:	9007-SW3

Pesticide/PCB	Dilution Factor	% Solid	MDL (mg/kg)	Result (mg/kg)	Cleanup Criteria (mg/kg)	Weight (g)
Arochlor 1016	1	89.30	0.0123	ND	0.49	10.16
Arochlor 1221	1	89.30	0.0227	ND	0.49	10.16
Arochlor 1232	1	89.30	0.0154	ND	0.49	10.16
Arochlor 1242	1	89.30	0.0176	ND	0.49	10.16
Arochlor 1248	1	89.30	0.0071	ND	0.49	10.16
Arochlor 1254	1	89.30	0.0044	ND	0.49	10.16
Arochlor 1260	1	89.30	0.0040	ND	0.49	10.16

ND = Not Detected MDL = Method Detection Limit Column-Primary: Column-Confirmation: Rtx-5 30m/.32mmID/.25um Rtx-1701 30m/.32mmID/.25um

Client:	US. Army	Project # :	5852
	DPW. SELFM-PW-EV	Location :	9007
	Bldg. 173	UST Reg. #:	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	13-Nov-00
Matrix :	Soil	Date Extracted :	14-Nov-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	14-Nov-00
Injection Volume	luL	Analyst :	B. Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5852.01	9007-EPS1	1.00	15.52	89.94	168	385.54
5852.02	9007-B6	1.00	15.37	82.45	185	ND
5852.03	9007-NW1	1.00	15.50	87.52	173	ND
5852.04	9007-SW1	1.00	15.34	90.81	169	ND
5852.05	9007-NE1	1.00	15.12	88.60	175	ND
5852.06	9007-SE1	1.00	15.65	87.87	171	ND
5852.07	9007-SE2	1.00	15.17	83.77	185	ND
5852.08	9007-SW2	1.00	15.40	90.29	169	ND
5852.10	9007-SW3	1.00	15.26	89.30	172	ND
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	· <u>·</u>					
		· · · · · · · · · · · · · · · · · · ·			 	<u>_</u>
METHOD BLANK	TBLK437	1.00	15.00	100.00	157	ND

ND = Not Detected

.MDL = Method Detection Limit
United States Army Fort Monmouth, New Jersey

Underground Storage Tank Remedial Investigation Report

Building 9401 Camp Evans Area

NJDEP UST Registration No. 90029-35

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Table 1	Summary of Remedial Excavation Sampling Activities
Table 2	Remedial Excavation Soil Sampling Results

FIGURES

Figure 1	Building 9401 -	- Remedial Excavation Location Map
Elemen 3	Duilding 0401	Demodial Call Comple Leasting

Figure 2 Building 9401 – Remedial Soil Sample Locations

APPENDICES

- Appendix A Signed Site Assessment Summary
- Appendix B Photographs of Remedial Excavation
- Appendix C Soil Sample Analytical Data Package

EXECUTIVE SUMMARY

Remedial Excavation

Between January 26, 2000 and February 2, 2000, a remedial excavation was performed at the former location of an underground storage tank (UST) at Building 9401 in the Camp Evans area of the U.S. Army Fort Monmouth, Wall Township, New Jersey. The UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-35 (Fort Monmouth Identification No. 9401), had formerly been located north of Building 9401. The UST was a 1,000-gallon, No. 2 fuel oil tank, and had been closed by removal in 1991.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and Versar, Inc. (Versar) (formerly SMC Environmental Services Group). Samples collected at the time the remedial excavation was performed contained concentrations of total petroleum hydrocarbons (TPHC) ranging from non-detect to 2,216.46 milligrams per kilogram (mg/kg). After additional soil was excavated and removed, soil remaining in the excavation contained concentrations of TPHC ranging from non-detectable to 845.33 mg/kg. The total amount of soil removed from the excavation was 235 cubic yards.

Site Restoration

After receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with clean native soil from the Building 9401 area, as well as clean soil imported from the New Jersey Sand and Gravel Company. The excavation site was then restored to its original condition.

i.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in soil at the former location of the UST or associated piping do not exceed the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth. No further action is proposed with regard to the site assessment of UST No. 90029-35 at Building 9401.

1.0 REMEDIAL INVESTIGATION ACTIVITIES

A remedial excavation was performed at the former location of an underground storage tank (UST) between January 26, 2000 and February 2, 2000. The former UST, New Jersey Department of Environmental Protection (NJDEP) Registration No. 90029-35, had been previously closed by removal at Building 9401 at the Camp Evans area of U.S. Army Fort Monmouth, Wall Township, New Jersey in 1991. The UST, a steel 1,000-gallon tank containing No. 2 fuel oil, had been located north of Building 9401. The excavation was performed to remediate TPHC contamination that had been discovered during the deactivation of underground utilities at Building 9401.

The remedial excavation was performed in accordance with the Site Assessment Section of the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for the former location of UST No. 90029-35 is included in Appendix A.

Based on an inspection of the remedial excavation, field screening of subsurface soil, and soil sample analytical results, Tetra Tech has concluded that at least one significant historical discharge was associated with the former UST No. 90029-35 or associated piping.

This report was prepared based on information collected at the time the remedial excavation was performed. Section 1 of this remedial investigation report provides a site description and summarizes remedial excavation activities. Section 2 describes site investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

Building 9401 is located in the main section of the Camp Evans area of the Fort Monmouth Army Base as shown in Figure 1. UST No. 90029-35 was located north of Building 9401 and its associated piping ran approximately 10 feet south from the UST to Building 9401. Figure 1 shows the former location of the UST and the remedial excavation relative to Building 9401.

1.2 REMEDIAL EXCAVATION ACTIVITIES

Tetra Tech began excavation at the former location of the UST adjacent to the transformer area on the north side of Building 9401 (the initial excavation location had been selected based on information obtained from Fort Monmouth, as to the former location of the UST). Subsequently, clean backfill material was observed in the west wall of the excavation which indicated that the UST had been located farther west than previously indicated. As a result, the excavation was extended to the west (see Figure 2). After the excavation was extended, visual evidence of contamination was observed by the Tetra Tech subsurface evaluator and detected by a photoionization detection (PID) and flame ionization detector (FID) in soil at the bottom of the western half of the excavation (Appendix B provides photographs of the remedial excavation). After soil samples of the contaminated soil were collected for documentation purposes, the contaminated soil was removed and transported to the soil staging area and additional post-excavation samples were collected.

1.3 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figure 2 and discussed in Section 2.2. Based on PID/FID air monitoring results and total petroleum hydrocarbon (TPHC) results from post-excavation soil samples, soil at the 9401B2, 9401B3, and 9401B4 sample locations (western end of the excavation) was contaminated. This soil was removed to the staging area for disposal off site at a later date; and clean excavated soil and imported clean fill were used to backfill the UST excavation.

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and Versar personnel conducted the site assessment. The site investigation was managed by Tetra Tech and performed by Versar. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date of UST closure specified in NJDEP-BUST's document "Interim Closure Requirements for Underground Storage Tank Systems" dated October 1990;

revisions dated November 1, 1991. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in UST closure and site investigation activities:

- Subsurface Evaluator: Kevin J. Phelan Employer: Tetra Tech EM Inc. Telephone No.: (973) 983-0507 NJDEP Certification No.: 0018436
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP-certified subsurface evaluator to identify potentially contaminated material. Soil removed from the excavation sidewalls and bottom did exhibit evidence of potential contamination at the time the remedial excavation was performed, and was removed to the staging area.

2.2 SOIL SAMPLING

On January 26, 200, after completion of the initial phase of the remedial excavation, post-excavation soil samples 9401S1, 9401W1, and 9401B1 were collected from three locations in the excavation. Figure 2 presents the sampling locations. Excavation sidewall samples were collected at the edge of the remedial excavation and bottom samples were collected from 5.5 to 6 feet below ground surface (bgs). The sidewall samples were collected from 5 to 5.5-feet bgs. Samples 9401SP1, 9401SP2, 9401SP3 were collected from adjacent overburden soil piles to verify that the piles were not contaminated and could be used as clean backfill for the excavation. All samples were analyzed for TPHC and total solids.

Analytical results for the original post-excavation samples revealed a maximum of 845.53 milligrams per kilogram (mg/kg) TPHC at the 9401SP1 sample location from one of the overburden soil piles. This concentration does not exceed 1,000 mg/kg TPHC, which is NJDEP's criterion for additional soil removal/remediation or for required volatile organic compound (VOC) sampling. However, because the backfill from the UST removal could be clearly distinguished in the western sidewall of the initial phase

of the remedial excavation, Tetra Tech and Versar continued excavating additional soil on January 31 and February 1, 2000. After completion of the additional excavation, post-excavation soil samples 9401S2, 9401S3, 9401E1, 9401N1, 9401B2, 9401B3, 9401B4, 9401B5, 9401B6, 9401W1, and 9401B7 were collected from a total of ten locations. Because indications of contamination were observed, Tetra Tech collected samples 9401B2, 9401B3, and 9401B4 to document the contamination and then excavated the soil and removed it to the staging area. After the removal of the contaminated soil, Tetra Tech collected additional bottom soil samples. As a result of the excavation activities, bottom samples were collected from 6 to 6.5-feet bgs and 9 to 9.5-feet bgs and sidewall samples were collected between 3 to 3.5-feet bgs and from 6 to 6.5-feet bgs. All samples were analyzed for TPHC and total solids.

Laboratory analytical results for the second phase of remedial post-excavation samples revealed TPHC concentrations of 2,216.45 mg/kg at the 9401B3 sample location and 1,696.33 mg/kg at the 9401B4 sample location. These concentrations exceed the NJDEP's cleanup criterion of 1,000 mg/kg TPHC requiring additional soil removal or VOC sampling; however, this soil had already been excavated and removed to the soil staging area. The laboratory analytical results for the underlying bottom samples and the sidewall samples revealed non-detectable concentrations of TPHC.

On February 2, 2000, Tetra Tech and Versar conducted a final phase of remedial excavation in order to remove all questionable material. After the excavation was completed, Tetra Tech collected post-excavation soil samples 9401B8, 9401N2, and 9401E2 from three sampling locations. The bottom sample was collected from 9 to 9.5-feet bgs and the sidewall samples were collected between 4.5 to 5-feet bgs and 10 to 10.5-feet bgs (the sidewall samples were collected from areas that appeared to be visually questionable). All samples were analyzed for TPHC and total solids.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's Field Sampling Procedures Manual dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions after the remedial excavation was performed, post-excavation soil samples were collected from six locations on January 26, 2000, one location on January 31, 2000, ten locations on February 1, 2000, and three locations on February 2, 2000. All samples were analyzed for TPHC and total solids. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 2. The analytical data package is provided in Appendix C.

All of the post-excavation soil samples collected on January 26, 2000, January 31, 2000, and February 1, 2000 contained concentrations of TPHC ranging from non-detect to 2,216.45 milligrams per kilogram (mg/kg). The samples collected on February 2, 2000 contained non-detectable concentrations of TPHC.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for all post-excavation soil samples for soil remaining in the remedial UST excavation at Building 9401 were below the NJDEP soil cleanup criterion for required VOC analysis.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, no longer exist in the former location of the UST or associated piping; therefore, no further action is proposed with regard to the site assessment of UST No. 90029-35 at Building 9401.

Legend of Samp ان identifications Camp Evans Area Wall Township, New Jersey

	wai township, new Jersey
В	Sample from the bottom of the excavation
W	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
N	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to
	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that
	particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed
	above).
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil").
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
001174	sample could be collected for both lines
SUNTI	Sample collected at a location of suspected contamination
	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
	lest pivirench
	Hazardous waste area building (former location)
AOI 040EAOTD4	Above ground storage tank
	Sample collected at the former location of an AST at the specified building
SD	Semple collected from a storm drain
SW	Sample collected from a sidewall of a remodial everyotion
CTR	Connor fubing run
CSP-1	Clean sail aile

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Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
	÷.					
9401/S1	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401/W1	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401/B1	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401SP1	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401SP2	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401SP3	1/26/00	1/27/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401S2	1/31/00	2/1/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401S3	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401E1	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401N1	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401B2	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401B3	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	oqa-qam-025
9401B4	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401B5**	2/1/00	2/2/00	Soil	Post-Excavation	ТРНС	CQA-QAM-025
9401B6**	2/1/00	2/2/00	Soll 4	Post-Excavation	TPHC	0QA-QAM-025
9401W1	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401B7	2/1/00	2/2/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401B8	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401N2	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	OQA-QAM-025
9401E2	2/2/00	2/3/00	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Remedial -Excavation Sampling Activities Building 9401, Camp Evans Area Wall Township, New Jersey

Note:

*TPHC

Total petroleum hydrocarbons Samples collected to remediate contamination found in sample above. **

			:	Analvtical	Method	•	NJDEP Soil Cleanup	Exceeds
	Sample		Analysis	Method	Detection	Result	Criteria*	Cleanup
Sample ID	Laboratory ID	Sample Date	Date(s)	Used	Limit (mg/kg)	(mg/kg)	(mg/kg)	Criteria
					·······		w	<u> </u>
9401/S1	5122.01	1/26/00	1/27/00	TPHC	180	ND	10,000	No
9401/W1	5122.02	1/26/00	1/27/00	TPHC	177	ND	10,000	No
9401B1	5122.03	1/26/00	1/27/00	TPHC	177	ND	10,000	No
9401SP1	5122.04	1/26/00	1/27/00	TPHC	184	845.53	10,000	No
9401SP2	5122.05	1/26/00	1/27/00	TPHC	189	ND	10,000	No
9401SP3	5122.06	1/26/00	1/27/00	TPHC	178	ND	10,000	No
9401S2	5132.01	1/31/00	2/1/00	TPHC	173	ND	10,000	No
9401S3	5134.01	2/1/00	2/2/00	TPHC	176	ND	10,000	No
9401E1	5134.02	2/1/00	2/2/00	TPHC	189	ND	10,000	No
9401N1	5134.03	2/1/00	2/2/00	TPHC	175	ND	10,000	No
9401B2	5134.04	2/1/00	2/2/00	TPHC	179	301.21	10,000	No
9401B3	5134.05	2/1/00	2/2/00	TPHC	177	2,216.45	10,000	No
9401B4	5134.06	2/1/00	2/2/00	TPHC	176	1,676.33	10,000	No
9401B5**	5134.07	- 2/1/00	2/2/00	TPHC	168 ÷	ND	10,000	No
9401B6**	5134.08	2/1/00	2/2/00	TPHC	169	ND	Le 10,000	No
9401W1	5134.09	2/1/00	2/2/00	TPHC	184	ND	10,000	No
9401B7	5134.10	2/1/00	2/2/00	TPHC	162	ND	10,000	No
9401B8	5139.01	2/2/00	2/3-4/00	TPHC	179	ND	10,000	No
9401N2	5139.02	2/2/00	2/3-4/00	TPHC	166	ND	10,000	No
9401E2	5139.03	2/2/00	2/3-4/00	TPHC	176	ND	10,000	No

Table 2 Remedial Excavation Soil Sampling Results Building 9401, Camp Evans Area Wall Township, New Jersey

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

TPHC

Total petroleum hydrocarbons Samples collected to remediate contamination found in sample above. **





APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM UST NO. 90029-35

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

		•							
	A. Facility Name: US Army, Fort Monmouth, Evans Area								
ta ang ang ang ang ang ang ang ang ang an	Facility Street Address: Building 1207, DCSOPS-BID								
	Municipality: <u>Wall Township</u> County : <u>Monmouth</u>								
	Block: <u>240, 241 and 242</u> L	ot(s): 240 (55.01, 55.02, 55.03 & 55.04), 241 (1), 242 (1.01 & 1.02							
, 1 , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Telephone Number : (732) 23	<u>9-2427</u>							
	B. Owner (RP)'s Name: US Army, CECOM								
	Street Address: DCSOPS-BID, Bldg. 1207 City : Fort Monmouth								
	State: NJ Zip: 07703 Telephone Number : (732) 532-5052								
	C. (Check as appropriate)	D. (Complete all that apply)							
	• Site Investigation	• Assigned Case Manager : <u>Mr. Ian Curtis</u>							
	Report (SIR) \$500 Fee	 US1 Registration Number (10 or 12 digits): <u></u> Incident Report Number (10 or 12 digits): 							
	• Remedial Investigation	• Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u>							
	Report (RIR) \$1000 Fee								
	E. Certification by the Subsurface Evaluator:								
	The attached report conforms to the specific reporting requirements of N_LAC_7.26E · Yes								
	Name: Kevin J. Phelan Signature: Kennin Q. Phelon UST Cert. No.: 0018436								
	Firm: Tetra Tech_EM, Inc.	Firm's UST Cert. Number: US00457							
	Firm Address: 1 Bank Stre	et, Suite 103_City: Rockaway							
	State: NJ Zip: 07	866 Telephone Number : (973) 9830507, Ext. 230							

1. 2. 3.	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
1. 2. 3.	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. 3.	submitted along with the certification; or
2. 3.	
	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 submitti false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree make a written false statement which I do not believe to be true. I am also aware that if I knowing direct or authorize the violation of any statute, I am personally liable for the penalties."
	Name (Print or Type): Mr. Charles Appleby
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	Signature:
	Company Name: US Army, CECOM, DCSOPS-BID, Fort Monmouth NJ, 07703

APPENDIX B

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PHOTOGRAPHS OF REMEDIAL EXCAVATION UST NO. 90029-35



PHOTO 1: View of questionable material in the eastern end of UST-9401 excavation (looking west).



PHOTO 2: View of backhoe excavating western end of UST-9401 excavation (looking southeast).



PHOTO 3: View of questionable material in sidewall of UST-9401 excavation (looking southeast).



PHOTO 4: View of UST-9401 site restoration (looking southwest).

APPENDIX C

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SOIL SAMPLE ANALYTICAL DATA PACKAGE UST NO. 90029-35

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Client :	U.S. Army	Project # :	5122
	DPW. SELFM-PW-EV	Location :	Bldg.9401
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	26-Jan-00
Matrix :	Soil	Date Extracted :	27-Jan-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	27 - Jan-00
Injection Volume	e: luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5122.01	9401-S1	1.00	15.06	86.66	180	ND
5122.02	9401-W1	1.00	15.19	87.20	177	ND
5122.03	9401-B1	1.00	15.55	85.40	177	ND
5122.04	9401-SP1	1.00	15.05	84.65	184	845.53
5122.05	9401-SP2	1.00	15.01	83.05	189	ND
5122.06	9401-SP3	1.00	15.22	86.61	178	ND
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						<u>.</u>
METHOD BLANK	TBLK317	1.00	15.00	100.00	157	ND

ND = Not Detected

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MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

Client :	U.S. Army	Project # :	5132
	DPW. SELFM-PW-EV	Location :	Bldg.9401
	Bldg. 173	UST Reg. #:	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	31-Jan-00
Matrix :	Soil	Date Extracted :	01-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	01-Feb-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5132.01	9401-S2	1.00	15.31	88.96	173	ND
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			<u> </u>			
METHOD BLANK	TBLK319	1.00	15.00	100.00	157	ND

ND = Not Detected

,

MDL = Method Detection Limit

Client :	U.S. Army	Project # :	5134
	DPW. SELFM-PW-EV	Location :	Bldg.9401
	Bldg. 173	UST Reg. # :	
	Ft. Monmouth, NJ 07703		
Analysis :	OQA-QAM-025	Date Received :	01-Feb-00
Matrix :	Soil	Date Extracted :	02-Feb-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	02-Feb-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5134.01	9401-S3	1.00	15.32	86.95	176	ND
5134.02	9401-E1	1.00	15.04	82.51	189	ND
5134.03	9401-N1	1.00	15.28	87.81	175	ND
5134.04	9401-B2	1.00	15.19	86.52	179	301.21
5134.05	9401-B3	1.00	15.45	86.01	177	2216.45
5134.06	9401-B4	1.00	15.32	87.09	176	1676.33
5134.07	9401-B5	1.00	15.18	91.89	168	ND
5134.08	9401-SB6	1.00	15.18	91.38	169	ND
5134.09	9401-W1	1.00	15.01	85.17	184	ND
5134.10	9401-B7	1.00	15.15	95.55	162	ND
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				. <u>.</u>		
METHOD BLANK	TBLK320	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

Laboratory Director

000004

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Client :	U.S. Army	Project # :	5139	
	DPW. SELFM-PW-EV	Location :	Bldg.9401 & 9007	
	Bldg. 173	UST Reg. # :		
	Ft. Monmouth, NJ 07703			
Analysis :	OQA-QAM-025	Date Received :	02-Feb-00	
Matrix :	Soil	Date Extracted :	03-Feb-00	
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake	
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	04-Feb-00	
Injection Volume :	luL	Analyst :	B.Patel	

Sample	Field ID	Dilution Weight Factor (g)		% Solid	MDL (mg/kg)	TPHC Result (mg/kg)	
5139.01	9401-B8	1.00	15.12	86.69	179	ND	
5139.02	9401-N2	1.00	15.05	93.95	166	ND	
5139.03	9401-E2	1.00	15.11	88.57	176	ND	
5139.04	9007 ### -E1	1.00	15.40	83.74	182	1978.76	
5139.05	90079990-N1	1.00	15.13	86.41	180	ND	
5139.06	ROOT SHOT B.M.H.	1.00	15.06	81.81	191	ND	
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		i	<u>_</u>				
		ļ					
	<u> </u>		<u> </u>		<u> </u>		
				<u>}</u>			
METHOD BLANK	TBLK321	1.00	15.00	100.00	157	ND	

ND = Not Detected

,

MDL = Method Detection Limit

Daniel K. Wright

Laboratory Director

United States Army Fort Monmouth, New Jersey

Site Investigation Report

Exploratory Test Trenching and Geoprobe/Hand Sampling of Suspect Tank Areas and Future AST Locations Camp Evans Area

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APPENDICES

- Appendix A Signed Site Assessment Summary Form
- Appendix B Photographs of Exploratory Test Trench Locations
- Appendix C Soil Sample Analytical Data Packages

EXECUTIVE SUMMARY

UST Closure

During the fall of 1997 and winter of 1998, exploratory test trenches were excavated at several dozen areas where old underground storage tanks (USTs) were suspected to be present at the Camp Evans area of the U.S. Army Fort Monmouth, Wall Township, New Jersey. The test trenches were excavated to confirm the presence or absence of USTs in the suspect areas.

Site Assessment

The site assessment was performed by Tetra Tech EM Inc. (Tetra Tech) and SMC Environmental Services Group (SMC). The only evidence of potentially contaminated soils was observed at the following buildings: 9004, 9057, 9089, 9090, and 9110. Samples collected at the time the test trenches were excavated contained concentrations of total petroleum hydrocarbons (TPHC) ranging from non-detect to 10,886.11 milligrams per kilogram (mg/kg). The total amount of soil removed from the excavations was 132 cubic yards.

Site Restoration

After receipt of clean post-excavation soil sampling results, the excavations were backfilled to grade with clean native soil from the surrounding area, and, if needed, clean soil imported from the New Jersey Sand and Gravel Company. The excavation sites were then restored to their original condition.

Conclusions and Recommendations

Based on post-excavation soil sampling results, TPHC concentrations in soil do not exceed the New Jersey Department of Environmental Protection (NJDEP) soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent soil cleanup criteria of 1,000 mg/kg TPHC used by Fort Monmouth, at all of the former test trench locations. No further action is proposed with regard to the test trench locations.

1.0 EXPLORATORY ACTIVITIES IN AREAS WITH SUSPECTED UNDERGROUND STORAGE TANKS

During the fall of 1997 and winter 1998, exploratory test trenches were excavated at several dozen areas where USTs were suspected to be located at the Camp Evans area of the U.S. Army Fort Monmouth, Wall Township, New Jersey.

The exploratory test trenches were performed in accordance with the Site Assessment section of the Fort Monmouth UST Management Plan (S.O.P. Number 19), which had previously been approved by the NJDEP. The signed site assessment summary form for the exploratory test trench activities is included in Appendix A.

Based on an inspection of the test trenches, field screening of subsurface soil, and soil sample analytical results, it appears that no significant historical discharges are associated with the majority of the test trench locations. However, evidence of historical discharges was observed at Building 9004 (beneath the location of a former aboveground storage tank [AST] and Building 9090 (at the location of a former UST that had previously been removed).

This report was prepared based on information collected at the time that the exploratory test trenches were excavated. Section 1 of this report provides a site description and summarizes exploratory trenching activities in areas of suspected USTs. Section 2 describes the exploratory investigation activities, including field screening and soil sampling. Section 3 presents the post-excavation soil sampling results. Conclusions and recommendations are presented in Section 4 of this report.

1.1 SITE DESCRIPTION

The Camp Evans area of the Fort Monmouth Army Base is located in Wall Township, Monmouth County, New Jersey as shown in Figure 1. Site maps are provided in Figures 1 through 50 showing the location of the suspected UST exploratory test trenches and Geoprobe/Hand Collection samples (for future ASTs) relative to the buildings at the Camp Evans area.

1.2 TEST TRENCHING IN AREAS WITH SUSPECTED UNDERGROUND STORAGE TANKS

Exploratory test trenches were excavated at locations where:

- USTs were suspected based on visual observations of possible fill ports or unknown copper tubing in the boiler/furnace rooms
- Buildings that had ASTs at the time the test trenches were excavated and may also have had USTs in the past
- Evidence of past excavations were noted around the buildings
- Old mapping of the Evans area indicated the presence of tanks in the past

The test trenches were excavated at one or more locations around various buildings in the Camp Evans area. In addition, samples were collected where excavations were performed for AST pads/foundations. The soils were observed and logged by the Tetra Tech site manager and the SMC subsurface evaluator. Appendix B provides photographs of several test trench locations. Soil in the excavations was screened visually and with a photoionization detector (PID) and flame ionization detector (FID) for evidence of contamination. No evidence of contamination was observed in the majority of the test trenches; however, visual and instrument evidence of contamination was observed at the following buildings: 9004, 9057, 9089, 9090, and 9110. Evidence of significant contamination from historical discharges was observed at Building 9004 (beneath a former AST location) and Building 9090 (where a UST had previously been removed in 1991). At the remainder of the above-mentioned building, the contamination appeared to have been the result of minor leaks and/or spills at the former tank locations rather than major discharges.

1.3 MANAGEMENT OF EXCAVATED SOILS

Post-excavation soil sampling locations are shown in Figures 1 through 50 and discussed in Section 2.2. Based on PID/FID air monitoring results and TPHC results from post-excavation soil samples, the majority of the test trench soils were not contaminated. Soil that was found to be contaminated by visual observations and PID/FID readings was removed to the staging area for disposal off site at a later date, and clean excavated soil and/or imported clean fill were used to backfill the excavation.

EX-3

2.0 SITE INVESTIGATION ACTIVITIES

In accordance with NJDEP's "Technical Requirements for Site Remediation" and "Field Sampling Procedures Manual," Tetra Tech and SMC personnel conducted the exploratory test trench site assessments. The site investigations were managed by Tetra Tech and performed by SMC. All analyses were performed and results reported by the U.S. Army Fort Monmouth Environmental Laboratory, a NJDEP-certified testing laboratory operated by TECOM-Vinnell Services, Inc. (TVS). All sampling was performed under the direct supervision of a NJDEP-certified subsurface evaluator in accordance with methods described in NJDEP's "Field Sampling Procedures Manual" dated 1992. Sampling frequency and parameters analyzed complied with applicable regulations at the date that the exploratory test trenching was performed. All records of site investigation activities are maintained by Tetra Tech and the Fort Monmouth Department of Public Works (DPW) Environmental Office.

The following parties participated in the suspected UST exploratory activities:

- Subsurface Evaluator (prior to 10/27/97): David H. Daniels Employer: SMC Environmental Services Group Telephone No.: (215) 788-7844
 NJDEP Certification No.: 0010279
- Subsurface Evaluator (after 10/28/97): Kevin J. Phelan Employer: Tetra Tech EM Inc. Telephone No.: (973) 983-0507
 NJDEP Certification No.: 0018436
- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory Contact Person: Daniel K. Wright Telephone No.: (732) 532-4359
 NJDEP Company Certification No.: 13461

2.1 FIELD SCREENING/MONITORING

Visual screening and field screening using a PID/FID were performed by a NJDEP-certified subsurface evaluator to identify potentially contaminated material. The majority of the soils excavated from the test trenches did not exhibit evidence of potential contamination at the time that the excavations were performed. Any soil that did exhibit indications of contamination was removed and transported to the soil staging area.

2.2 SOIL SAMPLING

After the excavation of a test trench was completed, a post-excavation soil sample was collected from the bottom of the excavation to confirm the presence or absence of TPHC contamination. Post-excavation samples were also collected if an area of possible soil staining or high PID/FID readings was observed. The depth of the samples varied between 5.0 and 7.0 feet below ground surface (bgs). All samples were analyzed for TPHC and total solids. After sample collection was completed and laboratory results indicated no contamination, the excavation was backfilled.

At buildings 9004, 9057, 9089, 9090, and 9110, contamination was either observed during trenching or documented by the laboratory analytical results. As a result, Tetra Tech and SMC performed additional soil removal/remediation and collected additional post-excavation soil samples. All samples were analyzed for TPHC and total solids. In addition, Tetra Tech performed three Geoprobe borings adjacent to the location of sample 9090W on November 8, 2000 at Building 9090 and collected samples for TPHC, volatile organic compounds (VOCs), and total solids. The samples were collected because no further soil could be removed without undermining a six-inch diameter water main.

Post-excavation soil samples were collected in accordance with standard sampling procedures specified in NJDEP's "Field Sampling Procedures Manual" dated 1992. Samples were chilled and delivered to the U.S. Army Fort Monmouth Environmental Laboratory in Fort Monmouth, New Jersey, for analysis. A summary of post-excavation sampling activities, including parameters analyzed for, is provided in Table 1.

3.0 SOIL SAMPLING RESULTS

To evaluate soil conditions at locations suspected of containing USTs at one time or another, postexcavation soil samples were collected from several dozen test trenches during the fall of 1997 and winter of 1998. All samples were analyzed for TPHC and total solids. In addition, samples were collected for VOC and BNA analysis where further soil removal would not be possible without undermining structures or utilities. Post-excavation sampling results were compared to the NJDEP residential direct contact soil cleanup criterion of 10,000 mg/kg for total organic contaminants (N.J.A.C. 7:26D and revisions dated February 3, 1994) and the more stringent soil cleanup criterion of 1,000 mg/kg TPHC used by Fort Monmouth. A summary of the analytical results and comparison to the

EX-5

NJDEP soil cleanup criterion is provided in Table 2. Soil sampling locations are shown in Figure 4. The analytical data package is provided in Appendix C.

The majority of the post-excavation soil samples collected from the exploratory test trenches revealed results below the NJDEP and Fort Monmouth soil cleanup criterion. The remainder of the samples, which were collected from Buildings 9004, 9057, 9089, 9090, and 9110, exceeded the soil cleanup criterion and required additional soil removal/remediation. After further soil removal/remediation and a second round of post-excavation soil sampling had been performed, the analytical results of the above-mentioned areas revealed concentrations of TPHC below the soil cleanup criterion, with the exception of test trench TP-9090. The analytical results from the western side of the excavation revealed a TPHC concentration of 2,122.06 mg/kg (further excavation could not be performed at the time due to a stormwater drainage pipe which also ran along the western side of the excavation). As a result, three Geoprobe borings were performed and the analytical results were below the NJDEP soil cleanup criteria.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results for the majority of the post-excavation soil samples collected from the exploratory test trenches were below the NJDEP soil cleanup criterion for required VOC analysis. At the remainder of the test trench and Geoprobe locations, VOC and BNA results were below method detection limits.

Based on post-excavation sampling results, soil containing TPHC concentrations exceeding the NJDEP soil cleanup criterion for total organic contaminants of 10,000 mg/kg, or the more stringent Fort Monmouth soil cleanup criterion of 1,000 mg/kg TPHC, do not exist in the test trench locations or Geoprobe locations. Therefore, no further action is proposed with regard to the test trench locations, Geoprobe, or AST locations.

Legend of Samp ات Identifications Camp Evans Area Wall Township, New Jersey

В	Sample from the bottom of the excavation
W	Samples from the west sidewall of the excavation
E	Samples from the east sidewall of the excavation
N	Samples from the north sidewall of the excavation
S	Samples from the south sidewall of the excavation
RF	Sample from beneath the former location of the return/feed lines of the UST
VL	Sample from beneath the former location of the vent line to the UST
OBS	Sample from the overburden soil pile of a UST excavation to determine if the soil can be used as backfill or must be transported to
	the contaminated soil stockpile
N21	Sample collected from the north sidewall on the second day of sampling (from a particular UST excavation) first sample (from that particular sidewall or area of the excavation) (NOTE: The "21" designation can be used with any of the letter combinations listed above)
FPS	Soil located directly adjacent to the fill port of the tank ("Fill Port Soil")
BFP	Soil located beneath the fill port of the tank ("Beneath Fill Port")
9116CSP	Contaminated soil pile from the UST-9116 excavation
DS	Deep Sample
9196BE1A	Geoprobe boring performed on the east side of the UST-9196 excavation to investigate contamination from the leaking UST. Last
	number denotes the boring number and last letter indicates which sample in the sequence.
RFL/B6	Sample from remedial excavation of a leaking remote fill line/what area of the excavation the sample was collected.
RF(CT)	Samples was collected from return feed lines consisting of copper tubing.
RFL(2)	Samples collected from a second remote fill line for a particular UST excavation
RB1	Remedial excavation for a particular building. The second letter and number designate the particular area of the excavation where
	the sample was collected
CNFRM	Confirmatory sample to confirm that contamination has been removed
CNFM	Another designation for a confirmatory sample
R/F/VL	Return/feed/vent lines. Used at buildings where the return/feed lines and the vent lines were located close together and one
000	sample could be collected for both lines
SCN11	Sample collected at a location of suspected contamination
(W)E1	Sample collected from the eastern sidewall of the western half of the excavation (remedial excavation).
	lest pit/trench
	Hazardous waste area building (tormer location)
0105AQTR1	Above ground storage tank Semple collected at the former location of an AST at the specified building
	Delineation sample to document the extent of contamination
SD	Sample collected from a storm drain
SW	Sample collected from a sidewall of a remedial excavation
CTR	Conner tubing run
CSP-1	Clean soil nile

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Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·		
TP9059	8/28/97	9/3/97	Soil	Post-Excavation	TPHC	00A-0AM-025
TP9006	8/29/97	9/2/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9092	8/29/97	9/2/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9030C	8/29/97	9/2/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9027	8/29/97	9/2/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9021	9/2/97	9/3/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9019	9/2/97	9/3/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9392	9/2/97	9/3/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9110A	9/2/97	9/3/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9110B	9/2/97	9/3/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9035	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9057A	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9057B	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9057C	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9105A	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9105B	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9043A	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9043B	9/3/97	9/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9043C	9/4/97	9/5/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9110C	9/4/97	9/5/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9023	9/4/97	9/5/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9100	9/4/97	9/5/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9041A	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9307	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPHWAB	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9087(A)	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9087(B)	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9041B	9/5/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9111A	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9111B	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9113A	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Note:

Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
TP9113B	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9113C	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9113D	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9004A	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9004B	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9005A	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9005B	9/8/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9061A	9/9/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9061B	9/9/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9061C	9/9/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9061D	9/9/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9061E	9/9/97	9/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9043D	9/23/97	9/24/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
TP9043E	9/23/97	9/24/97	Soil	Post-Excavation	TPHC	EPA Method 8260
TP9043G	9/23/97	9/24/97	Soil	Post-Excavation	TPHC	EPA Method 8260
9019ASTB1	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019ASTB2	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019ASTS	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019ASTE	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019ASTN	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019ASTW	9/30/97	10/1/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTB1	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTB2	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTN	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTE	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTS	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9105ASTW	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9110ASTB1	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9110ASTB2	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9110ASTN	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9110ASTE	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Note:

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Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
9110ASTS	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9110ASTW	10/14/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTB1	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTB2	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTN	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTW	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTS	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9061ASTE	10/15/97	10/16/97	Soil	Post-Excavation	TPHC	oqa-qam-025
9004DEL1	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004B1	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004B2	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004B3	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SD1	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW1	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW2	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW3	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW4	10/24/97	10/25/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW5	10/28/97	10/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9004SW6	10/28/97	10/29/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A1	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A2	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(B)B1	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(B)B2	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(C)C1	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(D)D1	12/3/97	12/4/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
90900BS1	12/9/97	12/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
90900BS2	12/9/97	12/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090E1	12/9/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090E2	12/9/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090B1	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090B2	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1Summary of Post-Excavation Sampling ActivitiesExploratory/Remedial Test Pits for Suspected USTs/Former ASTsCamp Evans AreaWall Township, New Jersey

Note:
Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
						004 0414 005
9090W	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090E3	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090N	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9090S	12/10/97	12/11/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A1	12/19/97	12/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A2	12/19/97	12/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A3	12/19/97	12/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9091(A)A4	12/19/97	12/22/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089(Ŵ)A	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089(W)B	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089(W)C	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR1	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR2	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR3	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR4	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR5	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR6	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR7	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089CTR8	3/2/98	3/3/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW A (A)1	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW_A_(A)2	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW A.(B)1	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW A (B)2	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW A (C)1	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
TPW A (C)2	3/10/98	3/18/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089B1	3/13/98	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089B2	3/13/98	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
0080CNERM1	3/13/98	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
0080R3	3/13/98	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
0080B4	3/13/08	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025
9089N	3/13/98	3/16/98	Soil	Post-Excavation	TPHC	OQA-QAM-025

Table 1 Summary of Post-Excavation Sampling Activities Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Note:

Table 1Summary of Post-Excavation Sampling ActivitiesExploratory/Remedial Test Pits for Suspected USTs/Former ASTsCamp Evans AreaWall Township, New Jersey

Sample ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters*	Analysis Method
9089S 9089E 9089W 9089CNFRM2 9089CNFRM3 TP9089(UST1) TP9089(UST2) TP9015A	3/13/98 3/13/98 3/13/98 3/13/98 3/13/98 3/13/98 3/13/98 3/13/98 3/13/98 3/25/98	3/16/98 3/16/98 3/16/98 3/16/98 3/16/98 3/16/98 3/16/98 3/16/98 3/16/98	Soil Soil Soil Soil Soil Soil Soil Soil	Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation Post-Excavation	TPHC TPHC TPHC TPHC TPHC TPHC TPHC TPHC	OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025 OQA-QAM-025
TP9015B TP9015C	3/25/98 3/25/98	3/26/98 3/26/98	Soil Soil	Post-Excavation Post-Excavation	TPHC	OQA-QAM-025 OQA-QAM-025

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Table 2 Post-Excavation Soil Sampling Results Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
TP9059	2941.01	8/28/97	9/3/97	ТРНС	164	ND	10 000	No
TP9006	2946.01	8/29/97	9/2 - 3/97	TPHC	165	ND	10,000	No
TP9092	2946.02	8/29/97	9/2 - 3/97	TPHC	191	ND	10,000	No
TP9030C	2946.03	8/29/97	9/2 - 3/97	TPHC	172	ND	10,000	No
TP9027	2946.04	8/29/97	9/2 - 3/97	TPHC	159	ND	10,000	No
TP9021	2948.01	9/2/97	9/3 - 4/97	TPHC	161	ND	10,000	No
TP9019	2948.02	9/2/97	9/3 - 4/97	TPHC	161	ND	10,000	No
TP9392	2948.03	9/2/97	9/3 - 4/97	TPHC	154	ND	10,000	No
TP9110A	2948.04	9/2/97	9/3 - 4/97	TPHC	158	ND	10,000	No
TP9110B	2948.05	9/2/97	9/3 - 4/97	TPHC	171	10,769,86	10.000	Yes
TP9035	2958.01	9/3/97	9/4 - 5/97	TPHC	181	ND	10,000	No
TP9057A	2958.02	9/3/97	9/4 - 5/97	TPHC	166	5.318.29	10.000	Yes
TP9057B	2958.03	9/3/97	9/4 - 5/97	TPHC	165	4.550.56	10.000	Yes
TP9057C	2958.04	9/3/97	9/4 - 5/97	TPHC	173	ND	10.000	No
TP9105A	2958.05	9/3/97	9/4 - 5/97	TPHC	168	973.73	10.000	No
TP9105B	2958.06	9/3/97	9/4 - 5/97	TPHC	162	ND	10.000	No
TP9043A	2958.07	9/3/97	9/4 - 5/97	TPHC	159	ND	10.000	No
TP9043B	2958.08	9/3/97	9/4 - 5/97	TPHC	164	ND	10,000	No
TP9043C	2963.01	9/4/97	9/5/97	TPHC	192	ND	10,000	No
TP9110C	2963.02	9/4/97	9/5/97	TPHC	186	ND	10,000	No
TP9023	2963.03	9/4/97	9/5/97	TPHC	161	ND	10,000	No
TP9100	2963.04	9/4/97	9/5/97	TPHC	158	ND	10,000	No
TP9041A	2968.01	9/5/97	9/10/97	TPHC	182	ND	10,000	No
TP9307	2968.03	9/5/97	9/10/97	TPHC	158	ND	10,000	No
TPHWAB	2968.04	9/5/97	9/10/97	TPHC	168	ND	10,000	No
TP9087(A)	2968.05	9/5/97	9/10/97	TPHC	169	ND	10,000	No
TP9087(B)	2968.06	9/5/97	9/10/97	TPHC	155	ND	10,000	No
TP9041B	2968.07	9/5/97	9/10/97	TPHC	176	ND	10,000	No
TP9111A	2972.01	9/8/97	9/10 - 12/97	TPHC	158	ND	10,000	No
TP9111B	2972.02	9/8/97	9/10 - 12/97	TPHC	178	ND	10,000	No

Notes:

* Tetra Tech EM Inc. used the NJDEP limit of 10,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Taule 2 Post-Excavation Soil Sampling Results Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
TP9113A	2972.03	9/8/97	9/10 - 12/97	TPHC	165	244.94	10,000	No
TP9113B	2972.04	9/8/97	9/10 - 12/97	TPHC	150	ND	10,000	No
TP9113C	2972.05	9/8/97	9/10 - 12/97	TPHC	155	ND	10,000	No
TP9113D	2972.06	9/8/97	9/10 - 12/97	TPHC	147	221.94	10,000	No
TP9004A	2972.07	9/8/97	9/10 - 12/97	TPHC	163	476.18	10,000	No
TP9004B	2972.08	9/8/97	9/10 - 12/97	TPHC	238	1,288.66	10,000	No
TP9005A	2972.09	9/8/97	9/10 - 12/97	TPHC	176	261.34	10,000	No
TP9005B	2972.10	9/8/97	9/10 - 12/97	TPHC	168	268.41	10,000	No
TP9061A	2974.01	9/9/97	9/10 - 12/97	TPHC	157	889.01	10,000	No
TP9061B	2974.02	9/9/97	9/10 - 12/97	TPHC	167	ND	10,000	No
TP9061C	2974.03	9/9/97	9/10 - 12/97	TPHC	173	ND	10,000	No
TP9061D	2974.04	9/9/97	9/10 - 12/97	TPHC	165	ND	10,000	No
TP9061E	2974.05	9/9/97	9/10 - 12/97	TPHC	164	ND	10,000	No
TP9043D	3010.09	9/23/97	9/24 - 25/97	TPHC	157	174.87	10,000	No
TP9043E	3010.10	9/23/97	9/24 - 25/97	VOC	Various	ND	10,000	No
TP9043G	3010.12	9/23/97	9/24 - 25/97	VOC	Various	ND	10,000	No
9019ASTB1	3019.05	9/30/97	10/1 - 2/97	TPHC	156	ND	10,000	No
9019ASTB2	3019.06	9/30/97	10/1 - 2/97	TPHC	160	ND	10,000	No
9019ASTS	3019.07	9/30/97	10/1 - 2/97	TPHC	183	ND	10,000	No
9019ASTE	3019.08	9/30/97	10/1 - 2/97	TPHC	174	ND	10,000	No
9019ASTN	3019.09	9/30/97	10/1 - 2/97	TPHC	173	ND	10,000	No
9019ASTW	3019.10	9/30/97	10/1 - 2/97	TPHC	181	ND	10,000	No
9105ASTB1	3066.01	10/14/97	10/16 - 18/97	TPHC	172	ND	10,000	No
9105ASTB2	3066.02	10/14/97	10/16 - 18/97	TPHC	176	308.50	10,000	No
9105ASTN	3066.03	10/14/97	10/16 - 18/97	TPHC	175	ND	10,000	No
9105ASTE	3066.04	10/14/97	10/16 - 18/97	TPHC	165	ND	10,000	No
9105ASTS	3066.05	10/14/97	10/16 - 18/97	TPHC	164	ND	10,000	No
9105ASTW	3066.06	10/14/97	10/16 - 18/97	TPHC	162	ND	10,000	No
9110ASTB1	3067.01	10/14/97	10/16 - 18/97	TPHC	159	ND	10,000	No
9110ASTB2	3067.02	10/14/97	10/16 - 18/97	TPHC	163	ND	10,000	No

Notes:

* Tetra Tech EM Inc. used the NJDEP limit of 10,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Post-Excavation Soil Sampling Results Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9110ASTN	3067.03	10/14/97	10/16 - 18/97	TPHC	170	ND	10,000	No
9110ASTE	3067.04	10/14/97	10/16 - 18/97	TPHC	161	ND	10,000	No
9110ASTS	3067.05	10/14/97	10/16 - 18/97	TPHC	168	ND	10,000	No
9110ASTW	3067.06	10/14/97	10/16 - 18/97	TPHC	158	ND	10,000	No
9061ASTB1	3068.01	10/15/97	10/16 - 18/97	TPHC	166	ND	10,000	No
9061ASTB2	3068.02	10/15/97	10/16 - 18/97	TPHC	169	ND	10,000	No
9061ASTN	3068.03	10/15/97	10/16 - 18/97	TPHC	170	ND	10,000	No
9061ASTW	3068.04	10/15/97	10/16 - 18/97	TPHC	168	ND	10,000	No
9061ASTS	3068.05	10/15/97	10/16 - 18/97	TPHC	165	ND	10,000	No
9061ASTE	3068.06	10/15/97	10/16 - 18/97	TPHC	162	205.20	10,000	No
9004DEL1	3106.01	10/24/97	10/25/97	TPHC	217	1,756.63	10,000	Yes
9004B1	3106.03	10/24/97	10/25/97	TPHC	180	ND	10,000	No
9004B2	3106.04	10/24/97	10/25/97	TPHC	185	ND	10,000	No
9004B3	3106.05	10/24/97	10/25/97	TPHC	237	340.63	10,000	No
9004SD1	3106.06	10/24/97	10/25/97	TPHC	187	237.68	10,000	No
9004SW1	3106.08	10/24/97	10/25/97	TPHC	183	257.27	10,000	No
9004SW2	3106.09	10/24/97	10/25/97	TPHC	186	1,222.32	10,000	Yes
9004SW3	3106.10	10/24/97	10/25/97	TPHC	193	247.19	10,000	No
9004SW4	3106.11	10/24/97	10/25/97	TPHC	185	214.44	10,000	No
9004SW5	3112.01	10/28/97	10/29/97	TPHC	194	266.86	10,000	No
9004SW6	3112.02	10/28/97	10/29/97	TPHC	189	272.50	10,000	No
9091(A)A1	3194.13	12/3/97	12/4 - 5/97	TPHC	179	902.43	10,000	No
9091(A)A2	3194.14	12/3/97	12/4 - 5/97	TPHC	171	ND	10,000	No
9091(B)B1	3194.15	12/3/97	12/4 - 5/97	TPHC	154	ND	10,000	No
9091(B)B2	3194.16	12/3/97	12/4 - 5/97	TPHC	192	ND	10,000	No
9091(C)C1	3194.17	12/3/97	12/4 - 5/97	TPHC	160	ND	10,000	No
9091(D)D1	3194.18	12/3/97	12/4 - 5/97	TPHC	161	ND	10,000	No
90900BS1	3206.08	12/9/97	12/10 - 11/97	TPHC	177	244.42	10,000	No
9090OBS2	3206.09	12/9/97	12/10 - 11/97	TPHC	167	228.92	10,000	No
9090E1	3217.01	12/9/97	12/11 - 12/97	TPHC	170	ND	10,000	No

Notes:

* Tetra Tech EM Inc. used the NJDEP limit of 10,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
							40.000	
9090E2	3217.02	12/9/97	12/11 - 12/97	TPHC	183	10,886.11	10,000	Yes
9090B1	3217.03	12/10/97	12/11 - 12/97	TPHC	166	ND	10,000	NO
9090B2	3217.04	12/10/97	12/11 - 12/97	TPHC	156	ND	10,000	No
9090W	3217.05	12/10/97	12/11 - 12/97	TPHC	157	2,122.06	10,000	Yes
9090E3	3217.06	12/10/97	12/11 - 12/97	TPHC	162	ND	10,000	No
9090N	3217.07	12/10/97	12/11 - 12/97	TPHC	157	ND	10,000	No
9090S	3217.08	12/10/97	12/11 - 12/97	TPHC	158	ND	10,000	No
9091(A)A3	3249.07	12/19/97	12/22 - 23/97	TPHC	162	ND	10,000	No
9091(A)A4	3249.08	12/19/97	12/22 - 23/97	TPHC	164	ND	10,000	No
9091(A)A5	3249.09	12/19/97	12/22 - 23/97	TPHC	160	ND	10,000	No
9091(A)A6	3249.10	12/19/97	12/22 - 23/97	TPHC	163	ND	10,000	No
9089(W)A	3379.01	3/2/98	3/3 - 4/98	TPHC	156	ND	10,000	No
9089(W)B	3379.02	3/2/98	3/3 - 4/98	TPHC	183	ND	10,000	No
9089(W)C	3379.03	3/2/98	3/3 - 4/98	TPHC	180	ND	10,000	No
9089CTR1	3379.04	3/2/98	3/3 - 4/98	TPHC	184	2,823.87	10,000	Yes
9089CTR2	3379.05	3/2/98	3/3 - 4/98	TPHC	177	ND	10,000	No
9089CTR3	3379.06	3/2/98	3/3 - 4/98	TPHC	181	ND	10,000	No
9089CTR4	3379.07	3/2/98	3/3 - 4/98	TPHC	178	ND	10,000	No
9089CTR5	3379.08	3/2/98	3/3 - 4/98	TPHC	176	ND	10,000	No
9089CTR6	3379.09	3/2/98	3/3 - 4/98	TPHC	176	ND	10,000	No
9089CTR7	3379.10	3/2/98	3/3 - 4/98	TPHC	173	ND	10,000	No
9089CTR8	3379.11	3/2/98	3/3 - 4/98	TPHC	173	196.06	10,000	No
TPW.A.(A)1	3400.01	3/10/98	3/18/98	TPHC	163	ND	10,000	No
TPW.A.(A)2	3400.02	3/10/98	3/18/98	TPHC	163	ND	10,000	No
TPW.A.(B)1	3400.03	3/10/98	3/18/98	TPHC	160	ND	10,000	No
TPW.A.(B)2	3400.04	3/10/98	3/18/98	TPHC	160	ND	10,000	No
TPW.A.(C)1	3400.05	3/10/98	3/18/98	TPHC	176	ND	10,000	No
TPW.A.(C)2	3400.06	3/10/98	3/18/98	TPHC	176	ND	10,000	No
9089B1	3409.01	3/13/98	3/16 - 17/98	TPHC	186	810.71	10,000	No
9089B2	3409.02	3/13/98	3/16 - 17/98	TPHC	173	ND	10,000	No

Notes:

* Tetra Tech EM Inc. used the NJDEP limit of 10,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Table 2 Post-Excavation Soil Sampling Results Exploratory/Remedial Test Pits for Suspected USTs/Former ASTs Camp Evans Area Wall Township, New Jersey

Sample ID	Sample Laboratory ID	Sample Date	Analysis Date(s)	Analytical Method Used	Method Detection Limit (mg/kg)	Result (mg/kg)	NJDEP Soil Cleanup Criteria* (mg/kg)	Exceeds Cleanup Criteria
9089CNFRM1	3409.03	3/13/98	3/16 - 17/98	TPHC	177	ND	10,000	No
9089B3	3409.04	3/13/98	3/16 - 17/98	TPHC	165	ND	10,000	No
9089B4	3409.05	3/13/98	3/16 - 17/98	TPHC	164	ND	10,000	No
9089N	3409.06	3/13/98	3/16 - 17/98	TPHC	179	ND	10,000	No
90895	3409.07	3/13/98	3/16 - 17/98	TPHC	178	ND	10,000	No
9089W	3409.08	3/13/98	3/16 - 17/98	TPHC	167	ND	10,000	No
9089E	3409.09	3/13/98	3/16 - 17/98	TPHC	161	ND	10,000	No
9089CNFRM2	3409.10	3/13/98	3/16 - 17/98	TPHC	173	ND	10,000	No
9089CNFRM3	3409.11	3/13/98	3/16 - 17/98	TPHC	184	ND	10,000	No
TP9089(UST1)	3409.12	3/13/98	3/16 - 17/98	TPHC	173	ND	10,000	No
TP9089(UST2)	3409.13	3/13/98	3/16 - 17/98	TPHC	181	ND	10,000	No
TP9015A	3433.01	3/25/98	3/26/98	TPHC	175	454.54	10,000	No
TP9015B	3433.02	3/25/98	3/26/98	TPHC	172	509.70	10,000	No
TP9015C	3433.03	3/25/98	3/26/98	TPHC	175	567.84	10,000	No

Notes:

* Tetra Tech EM Inc. used the NJDEP limit of 10,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Table 1 Summary of Geoprobe/Hand Collection Sampling Activities (for New ASTs) Camp Evans Area

Wall Township, New Jersey

	Date	Date Analysis			Analytical	
Sample ID	Collected	Started	Matrix	Sample Type	Parameters*	Analysis Method
9019A1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019A2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019B1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019B2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019B3	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019B4	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019C1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019C2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019C3	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019D1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9019D2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392A1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392A2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392B1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392B2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392C1	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392C2	9/29/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9045A1	9/30/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9045B1	9/30/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9045C1	9/30/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9003A1	9/30/97	10/1/97	Soil	Core	TPHC	OQA-QAM-025
9392D1	10/2/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9307A1	10/2/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9307A2	10/2/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9196BE1A	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9196BF1B	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9196BE1C	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9196BE1D	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
91968E1E	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9196BE1F	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025

Note:

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Table T Summary of Geoprobe/Hand Collection Sampling Activities (for New ASTs) Camp Evans Area

Wall Township, New Jersey

	Date	Date Analysis			Analytical	
Sample ID	Collected	Started	Matrix	Sample Type	Parameters*	Analysis Method
9059A1	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9059A2	10/3/97	10/6/97	Soil	Core	TPHC	OQA-QAM-025
9014AST1	10/8/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9014AST2	10/8/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9307AST1	10/8/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9307AST2	10/8/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019AST1	10/9/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
9019AST2	10/9/97	10/10/97	Soil	Post-Excavation	TPHC	OQA-QAM-025
BL9064B1	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9064B2	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9064B3	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9041B1	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9041B2	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9041B3	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
BL9033B2	10/29/97	10/29/97	Soil	Core	TPHC	OQA-QAM-025
9116B1	10/30/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9001B1	10/30/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9012B1	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9012B2	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9028B1	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9028B2	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B1	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B1A	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B2	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B3	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B4	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B5	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9038B6	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
9012B3	10/31/97	11/3/97	Soil	Core	TPHC	OQA-QAM-025
CSP1	1/22/98	1/26/98	Soil	Post-Excavation	TPHC	OQA-QAM-025

Note:

Table 2Geoprobe/Hand Collection Sampling Results (for new ASTs)Camp Evans AreaWall Township, New Jersey

Page 1

				Analytical	Method		NJDEP Soil	Exceeds
	Sample		Analysis	Method	Detection	Result	Cleanup Criteria*	Cleanup
Sample ID	Laboratory ID	Sample Date	Date(s)	Used	Limit (mg/kg)	(mg/kg)	(mg/kg)	Criteria
9019A1	3018.01	9/29/97	10/1 - 2/97	TPHC	180	ND	1,000	No
9019A2	3018.02	9/29/97	10/1 - 2/97	TPHC	161	ND	1,000	No
9019B1	3018.03	9/29/97	10/1 - 2/97	TPHC	183	240.82	1,000	No
9019B2	3018.04	9/29/97	10/1 - 2/97	TPHC	161	ND	1,000	No
9019B3	3018.05	9/29/97	10/1 - 2/97	TPHC	173	ND	1,000	No
9019B4	3018.06	9/29/97	10/1 - 2/97	TPHC	155	ND	1,000	No
9019C1	3018.07	9/29/97	10/1 - 2/97	TPHC	177	1,582.52	1,000	Yes
9019C2	3018.08	9/29/97	10/1 - 2/97	TPHC	166	452.57	1,000	No
9019C3	3018.09	9/29/97	10/1 - 2/97	TPHC	167	ND	1,000	No
9019D1	3018.10	9/29/97	10/1 - 2/97	TPHC	163	ND	1,000	No
9019D2	3018.11	9/29/97	10/1 - 2/97	TPHC	178	ND	1,000	No
9392A1	3018.12	9/29/97	10/1 - 2/97	TPHC	185	ND	1,000	No
9392A2	3018.13	9/29/97	10/1 - 2/97	TPHC	160	ND	1,000	No
9392B1	3018.14	9/29/97	10/1 - 2/97	TPHC	189	ND	1,000	No
9392B2	3018.15	9/29/97	10/1 - 2/97	TPHC	154	ND	1,000	No
9392C1	3018.16	9/29/97	10/1 - 2/97	TPHC	154	ND	1,000	No
9392C2	3018.17	9/29/97	10/1 - 2/97	TPHC	152	ND	1,000	No
9045A1	3019.01	9/30/ 9 7	10/1 - 2/97	TPHC	157	ND	1,000	No
9045B1	3019.02	9/30/97	10/1 - 2/97	TPHC	170	ND	1,000	No
9045C1	3019.03	9/30/97	10/1 - 2/97	TPHC	161	195.91	1,000	No
9003A1	3019.04	9/30/97	10/1 - 2/97	TPHC	153	ND	1,000	No
9392D1	3028.01	10/2/97	10/6 - 8/97	TPHC	163	ND	1,000	No
9307A1	3028.02	10/2/97	10/6 - 8/97	TPHC	168	ND	1,000	No
9307A2	3028.03	10/2/97	10/6 - 8/97	TPHC	166	ND	1,000	No
9196BE1A	3031.01	10/3/97	10/6 - 8/97	TPHC	163	ND	1,000	No
9196BE1B	3031.02	10/3/97	10/6 - 8/97	TPHC	154	ND	1,000	No
9196BE1C	3031.03	10/3/97	10/6 - 8/97	TPHC	175	ND	1,000	No
9196BE1D	3031.04	10/3/97	10/6 - 8/97	TPHC	159	ND	1,000	No
9196BE1E	3031.05	10/3/97	10/6 - 8/97	TPHC	159	225.48	1,000	No
9196BE1F	3031.06	10/3/97	10/6 - 8/97	TPHC	170	246.34	1,000	No
9059A1	3031.13	10/3/97	10/6 - 8/97	TPHC	157	ND	1,000	No

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected

Table zGeoprobe/Hand Collection Sampling Results (for new ASTs)Camp Evans AreaWall Township, New Jersey

Page

			A 1 1	Analytical	Method	Desult	NJDEP Soil	Exceeds
0 1 10	Sample	Querta Data	Analysis	Methoa				Creanup
Sample ID	Laboratory ID	Sample Date		Used	Limit (mg/kg)	(mg/kg)	(mg/kg)	Criteria
005040	2024 44	10/2/07	10/6 0/07	TOUC	454		4.000	N1
9009AZ	3031.14	10/3/97	10/0 - 8/97	TPHC	154		1,000	NO
9014AST1	3057.01	10/0/97	10/10/97		160	ND	1,000	INO
9014AST2	3057.02	10/8/97	10/10/97	TPHC	165		1,000	NO
9307AST1	3057.03	10/8/97	10/10/97	TPHC	161	ND	1,000	NO
9307AS12	3057.04	10/8/97	10/10/97	IPHC	1/2	ND	1,000	No
9019AST1	3058.01	10/9/97	10/10/97	TPHC	176	ND	1,000	No
9019AST2	3058.02	10/9/97	10/10/97	TPHC	173	ND	1,000	No
BL9064B1	3114.01	10/29/97	10/29 - 30/97	TPHC	154	ND	1,000	No
BL9064B2	3114.02	10/29/97	10/29 - 30/97	TPHC	177	ND	1,000	No
BL9064B3	3114.03	10/29/97	10/29 - 30/97	TPHC	157	ND	1,000	No
BL9041B1	3114.04	10/29/97	10/29 - 30/97	TPHC	155	ND	1,000	No
BL9041B2	3114.05	10/29/97	10/29 - 30/97	TPHC	155	ND	1,000	No
BL9041B3	3114.06	10/29/97	10/29 - 30/97	TPHC	168	ND	1,000	No
BL9033B2	3114.07	10/29/97	10/29 - 30/97	TPHC	157	ND	1,000	No
9116B1	3129.01	10/30/97	11/3 - 4/97	TPHC	154	ND	1,000	No
9001B1	3129.02	10/30/97	11/3 - 4/97	TPHC	179	ND	1,000	No
9012B1	3129.03	10/31/97	11/3 - 4/97	TPHC	158	ND	1,000	No
9012B2	3129.04	10/31/97	11/3 - 4/97	TPHC	161	ND	1,000	No
9028B1	3129.05	10/31/97	11/3 - 4/97	TPHC	181	ND	1,000	No
9028B2	3129.06	10/31/97	11/3 - 4/97	TPHC	159	ND	1,000	No
9038B1	3129.07	10/31/97	11/3 - 4/97	TPHC	175	ND	1,000	No
9038B1A	3129.08	10/31/97	11/3 - 4/97	TPHC	169	ND	1,000	No
9038B2	3129.09	10/31/97	11/3 - 4/97	TPHC	182	ND	1,000	No
9038B3	3129.10	10/31/97	11/3 - 4/97	TPHC	172	ND	1,000	No
9038B4	3129.11	10/31/97	11/3 - 4/97 '	TPHC	172	ND	1,000	No
9038B5	3129.12	10/31/97	11/3 - 4/97	TPHC	174	ND	1,000	No
9038B6	3129.13	10/31/97	11/3 - 4/97	TPHC	186	ND	1,000	No
9012B3	3129.14	10/31/97	11/3 - 4/97	TPHC	179	ND	1,000	No
CSP1	3295.14	1/22/98	1/26 - 27/98	TPHC	170	ND	1,000	No

Note:

* Tetra Tech EM Inc. used the NJDEP limit of 1,000 ppm of TPHC before sampling for volatiles is required as a soil cleanup criteria.

ND Not detected




































































































APPENDIX A

SIGNED SITE ASSESSMENT SUMMARY FORM

(12/97) New Jersey Department of Environmental Protection Site Remediation Program

UST Site/Remedial Investigation Report Certification Form

A. Facility Name: US Army, Fort Monmouth, Evans Area					
Facility Street Address: Build	ding 1207, DCSOPS-BID				
Municipality: <u>Wall Township</u>	County : <u>Monmouth</u>				
Block: 240, 241 and 242 Lo	on(s): <u>240 (55.01, 55.02, 55.03 & 55.04), 241 (1), 242 (1.01 & 1.02</u>				
Telephone Number : (732) 23	9-2427				
B. Owner (RP)'s Name: U	S Army, CECOM				
Street Address: DCSOPS-E	BID, Bldg. 1207 City : Fort Monmouth				
State: <u>NJ</u> Zip: <u>07703</u>	State: NJ Zip: 07703 Telephone Number : (732) 532-5052				
C. (Check as appropriate)	D. (Complete all that apply)				
• Site Investigation	• Assigned Case Manager : <u>Mr. Ian Curtis</u>				
UST Registration Number : (7 digits): 90029 - N A Incident Report Number (10 or 12 digits):					
Remedial Tank Closure Number C(N)9 (7 characters): <u>Approved by Case Manager</u> Investigation					
Report (RIR) \$1000 Fee					
E. Certification by the Subsurface Evaluator:					
The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E : Yes					
Name: Kevin J. Phelan Signature: Karin J. Phalan UST Cert. No.: 0018436					
Firm: Tetra Tech EM, Inc. Firm's UST Cert. Number: US00457					
Firm Address: 1 Bank Street, Suite 103 City: Rockaway					
State: NJ Zip: 07866 Telephone Number : (973) 9830507, Ext. 230					

et sey.,	
F. Ce	ertification by the Responsible Party(ies) of the Facility:
The fol	lowing certification shall be signed [according to the requirements of N.J.A.C. 7:14B-1.7(b)]as follo
1.	For a Corporation by a person authorized by a resolution of the board of directors to sign the
2. 3.	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 the accurate, and complete. I am aware that there are significant civil penalties for knowingly submit false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree make a written false statement which I do not believe to be true. I am also aware that if I knowing direct or authorize the violation of any statute, I am personally liable for the penalties."
	Name (Print or Type): Mr. Charles Appleby
	Title: BRAC Environmental Coordinator, Evans Area
	NJDEP Subsurface Evaluator # 2056
	Signature:

APPENDIX B

PHOTOGRAPHS OF EXPLORATORY TEST TRENCH LOCATIONS

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PHOTO 1: View of TP-9043 (Excavation C) where copper tubing with traces of fuel oil/gasoline was found (looking north).



PHOTO 2: View of former AST location at Building 9004 prior to excavation of test trenches (looking south/southwest).



PHOTO 3: View of remedial excavation at Building 9004 to remove contamination caused by a former aboveground storage tank (AST) (looking east/southeast).



PHOTO 4: View of remedial excavation at Building 9090 to remove contamination caused by a former UST that had been removed previously (looking north).



PHOTO 5: View of exploratory test trench adjacent to a former building pad along Watson Avenue (looking south).

APPENDIX C

SOIL SAMPLE ANALYTICAL DATA PACKAGE

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

Client :	U.S. Army			Lab. ID # :		2941
	DPW. SELFM-PW-EV Bldg. 173			Date Rec'd: Analysis Start:		28-Aug-97 03-Sep-97
	Ft. Monmouth,	Ft. Monmouth, NJ 07703			nplete:	03-Sep-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			- Closure #:		
Analyst:	D.DEINHARD'	r		DICAR #:	BLDG, 9059	
Ext. Meth:	Shake			Location #:		
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2941.01	TP-9059	1.00	15.43	93.02	164	ND
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METHOD BLANK	2-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected MDL = Method Detection Limit

Daniel K. Wright

Laboratory Director

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

Client:	U.S. Army	Lab. ID # :	2946
	DPW. SELFM-PW-EV	Date Rec'd:	29-Aug-97
	Bldg. 173	Analysis Start:	02-Sep-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	03-Sep-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS.

9006, 9092

9030, 9027

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2946.01	TP-9006	1.00	15.99	89.18	165	ND
2946.02	TP-9092	1.00	15.34	80.30	191	ND
2946.03	TP-9030	1.00	16.06	85.02	172	ND
2946.04	TP-9027	1,00	16.27	90.75	159	ND
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					l	
METHOD BLANK	2-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

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

Client :	U.S. Army	Lab. ID # :	2948
	DPW. SELFM-PW-EV	Date Rec'd:	02-Sep-97
	Bldg. 173	Analysis Start:	03-Sep-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	04-Sep-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS.

9021, 9019 9392 9110

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2948.01	TP-9021	1.00	15.54	94.00	161	ND
2948.02	TP-9019	1.00	16.35	89.42	161	ND
2948.03	TP-9392	1.00	16.84	90.84	154	ND
2948.04	TP-9110A	1.00	16.30	91.14	158	ND
2948.05	TP-9110B	1.00	15.76	87.30	171	10769.86
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METHOD BLANK	3-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director
Client :	U.S. Army	Lab. ID # :	2958
	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 #:	BLDGS.

9035, 9057 9105, 9043

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Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2958.01	TP-9035	1.00	15.30	84.87	181	ND
2958.02	TP-9057A	1.00	16.19	87.56	166	5318.29
2958.03	TP-9057B	1.00	15.17	93.74	165	4550.56
2958.04	TP-9057C	1.00	15.57	87.19	173	ND
2958.05	TP-9105A	1.00	15.34	90.97	168	973.78
2958.06	TP-9105B	1.00	15.62	92.74	162	ND
2958.07	TP-9043A	1.00	15.59	95.07	159	ND
2958.08	TP-9043B	1.00	15.02	95.57	164	ND
METHOD BLANK	4-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

U.S. Army	Lab. ID # :	2963
DPW. SELFM-PW-EV	Date Rec'd:	04-Sep-97
Bldg. 173	Analysis Start:	05-Sep-97
Ft. Monmouth, NJ 07703	Analysis Complete:	05-Sep-97
OQA-QAM-025	UST Reg. #:	
Soil	Closure #:	
D.DEINHARDT	DICAR #:	
Shake	Location #:	BLDGS.
	U.S. Army DPW. SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703 OQA-QAM-025 Soil D.DEINHARDT Shake	U.S. ArmyLab. ID # :DPW. SELFM-PW-EVDate Rec'd:Bldg. 173Analysis Start:Ft. Monmouth, NJ 07703Analysis Complete:OQA-QAM-025UST Reg. #:SoilClosure #:D.DEINHARDTDICAR #:ShakeLocation #:

9043C, 9110C

						9023, 9100
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2963.01	TP-9043C	1.00	15.51	79.03	192	ND
2963.02	TP-9110C	1.00	15.59	81.10	186	ND
2963.03	TP-9023	1.00	15.33	95.28	161	ND
2963.04	TP-9100	1.00	15.75	94.49	158	ND
				· · · · · · · · · · · · · · · · · · ·		
METHOD BLANK	5-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	2968
	DPW. SELFM-PW-EV	Date Rec'd:	05-Sep-97
	Bldg. 173	Analysis Start:	10-Sep-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	10-Sep-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS.
			9041, 9043

9307, 9087

HAZ WASTE AREA

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2968.01	TP-9041A	1.00	15.20	85.14	182	ND
2968.03	TP-9307	1.00	15.35	97.15	158	ND
2968.04	TP-HWAB	1.00	15.76	88.64	168	ND
2968.05	TP-9087(0-0.5)	1.00	15.64	89.11	169	ND
2968.06	TP-9087(6-6.5)	1.00	15.94	95.37	155	ND
2968.07	TP-9041B(5-5.5	1.00	15.27	87.46	176	ND
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METHOD BLANK	10-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	2972
	DPW. SELFM-PW-EV	Date Rec'd:	08-Sep-97
	Bldg. 173	Analysis Start:	10-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 #: BLDGS.	

9111A, 9111**8**, 9111A, 9111B

9113C, 9113**p**, 9113A, 9113B

9005A, 9005B

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2972.01	TP-9111A	1.00	15.27	97.46	158	ND
2972.02	TP-9111B	1.00	15.01	87.97	178	ND
2972.03	TP-9113A	1.00	15.20	93.88	165	244.94
2972.04	TP-9113B	1.00	16.37	95.84	150	ND
2972.05	TP-9113C	1.00	15.55	97.19	155	ND
2972.06	TP-9113D	1.00	16.22	98.87	147	221.94
2972.07	TP-9004A	1.00	15.24	94.66	163	476.18
2972.08	TP-9004B	1.00	15.47	63.77	238	1288.66
2972.09	TP-9005A	1.00	15.80	84.40	176	261.34
2972.10	TP-9005B	1.00	15.02	93.37	168	268.41
METHOD BLANK	10-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client:	U.S. Army			Lab. ID # :		2974
	DPW. SELFM-PW-EV			Date Rec'd:		09-Sep-97
	Bldg. 173	Bldg. 173			rt:	10-Sep-97
	- Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	12-Sep-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD'	r		DICAR #:		
Ext. Meth:	Shake			Location #:	BLDGS. 9061	
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
2974.01	TP-9061A	1.00	15.94	94.11	157	889.01
2974.02	TP-9061B	1.00	15.43	91.02	167	ND
2974.03	TP-9061C	1.00	15.05	90.27	173	ND
2974.04	TP-9061D	1.00	15.49	91.69	165	ND
2974.05	TP-9061E	1.00	15.78	90.76	164	ND
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METHOD BLANK	10-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client :	U.S. Army	U.S. Army				3010
	DPW. SELFM-PW-EV Bldg. 173			Date Rec'd: Analysis Start:		23-Sep-97 24-Sep-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	aplete:	25-Sep-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD'	r		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDGS.
						9003, 9043
		·=-				9006
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3010.01	9003-RF	1.00	15.79	97.23	153	416.82
3010.02	9003-B1	1.00	15.63	90.68	166	ND
3010.03	9003-B2	1.00	16.14	92.56	157	ND
3010.04	9003-B3	1.00	15,36	93.34	164	ND
3010.05	9003-S	1.00	15.05	95.58	163	ND
3010.06	9003-E	1.00	15.57	90.16	167	ND
3010.07	9003-W	1.00	15.13	92.58	168	ND
3010.08	9003-N	1.00	15.35	93.15	164	ND
3010.09	TP-9043D	1.00	15.29	97.67	157	174.87
METHOD BLANK	24-Sep-97	1.00	15.00	100.00	157	ND

ND = Not Detected

METHOD BLANK

MDL = Method Detection Limit

6

Daniel K. Wright Laboratory Director

24-Sep-97

Client :	U.S. Army			Lab. ID # :		3018
	DPW. SELFM-PW-EV			Date Rec'd:		01-Oct-97
	Bldg. 173			Analysis Sta	rt:	01-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	02-Oct-97
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Analysis:	OQA-QAM-025	I		UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD'	Т		DICAR #:		
Ext. Meth:	Shake			Location #:		9019, 9392
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3018.01	9019-A1	1.00	15.13	86.44	180	ND
3018.02	9019-A2	1.00	15.57	93.57	161	ND
3018.03	9019-B1	1.00	15.22	84.33	183	240.82
3018.04	9019-B2	1.00	15.74	92.55	161	ND
3018.05	9019-B3	1.00	15.61	87.25	173	ND
3018.06	9019-B4	1.00	15.62	96.96	155	ND
3018.07	9019-C1	1.00	15.72	84.34	177	1582.52
3018.08	9019-C2	1.00	15.67	90.34	166	452.57
3018.09	9019-C3	1.00	15.46	91.23	167	ND
3018.10	9019-D1	1.00	15.00	95.97	163	ND
3018.11	9019-D2	1.00	15.12	87.18	178	ND
3018.12	9392-A1	1.00	15.09	84.30	185	ND
3018.13	9392-A2	1.00	15.79	92.93	160	ND
3018.14	9392-B1	1.00	15.11	82.47	189	ND
3018.15	9392-B2	1.00	15.80	96.62	154	ND
3018.16	9392-C1	1.00	15.75	97.08	154	ND
3018.17	9392-C2	1.00	16.06	96.49	152	ND
METHOD BLANK	1-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	3019
	DPW. SELFM-PW-EV	Date Rec'd:	01-Oct-97
	Bldg. 173	Analysis Start:	01-Oct-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	02-Oct-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS.

9045, 9003 9019

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3019.01	9045-A1	1.00	15.97	93.70	157	ND
3019.02	9045-B1	1.00	15.11	91.72	170	ND
3019.03	9045-C1	1.00	15.63	93.33	161	195.91
3019.04	9003-A1	1.00	15.56	98.62	153	ND
3019.05	9019-ASTB1	1.00	16.02	93.82	156	ND
3019.06	9019-ASTB2	1.00	15.56	94.26	160	ND
3019.07	9019-ASTS	1.00	14.98	85.71	183	ND
3019.08	9019-ASTE	1.00	15.61	86.37	174	ND
3019.09	9019-ASTN	1.00	15.98	85.00	173	ND
3019.10	9019-ASTW	1.00	15.02	86.68	181	ND
METHOD BLANK	1-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

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Laboratory Director

Client :	U.S. Army			Lab. ID # :		3028
	DPW. SELFM-	PW-EV		Date Rec'd:		02-Oct-97
	Bldg. 173			Analysis Sta	rt:	06-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	08-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD	Г		DICAR #:		
Ext. Meth:	Shake			Location #:		9392, 9307
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3028.01	9392-D-1	1.00	15.72	91.82	163	ND
3028.02	9307-A-1	1.00	15.59	89.75	168	ND
3028.03	9307-A-2	1.00	16.17	87.77	166	ND
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METHOD BLANK	6-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3031
	DPW. SELFM-	PW-EV		Date Rec'd:		03-Oct-97
	Bldg. 173			Analysis Sta	rt:	06-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	08-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARD?	r		DICAR #:		
Ext. Meth:	Shake			Location #:		9196
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3031.01	9196-BE1A	1.00	15.33	93.82	163	ND
3031.02	9196-BE1B	1.00	15.71	96.83	154	ND
3031.03	9196-BE1C	1.00	15.10	88.77	175	ND
3031.04	9196-BE1D	1.00	16.01	92.42	159	ND
3031.05	9196-BE1E	1.00	15.83	93.20	159	225.48
3031.06	9196-B31F	1.00	14.98	92.16	170	246.34
3031.13	9059-A1	1.00	15.99	93.52	157	ND
3031.14	9059-A2	1.00	15.60	97.65	154	ND
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METHOD BLANK	6-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	3057
	DPW. SELFM-PW-EV	Date Rec'd:	09-Oct-97
	Bldg. 173	Analysis Start:	10-Oct-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	10-Oct-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS.
			9014, 9307

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3057.01	9014-AST1	1.00	15.38	95.22	160	ND
3057.02	9014-AST2	1.00	14.96	95.24	165	ND
3057.03	9307-AST1	1.00	16.14	90.31	161	ND
3057.04	9307-AST2	1.00	15.33	89.04	172	ND
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METHOD BLANK	10-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright

Laboratory Director

Client :	U.S. Army			Lab. ID # :		3058
	DPW. SELFM-	PW-EV		Date Rec'd:		09-Oct-97
	Bldg. 173			Analysis Sta	rt:	10-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Complete:		10-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARD	C		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9019
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3058.01	9019-AST1	1.00	15.38	86.73	176	ND
3058.02	9019-AST2	1.00	15.52	87.45	173	ND
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METHOD BLANK	10-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K, Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3066
	DPW. SELFM-F	PW-EV		Date Rec'd:		15-Oct-97
	Bldg. 173			Analysis Sta	rt:	16-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	18-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARDI	1		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9105
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3066.01	9105-ASTB1	1.00	15.48	88.08	172	ND
3066.02	9105-ASTB2	1.00	14.97	89.35	176	308.50
3066.03	9105-ASTN	1.00	15.12	88.74	175	ND
3066.04	9105-ASTE	1.00	15.36	92.89	165	ND
3066.05	9105-ASTS	1.00	15.61	91.88	164	ND
3066.06	9105-ASTW	1.00	15.35	94.32	162	ND
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METHOD BLANK	16-Oct-97	1.00	15.00	100.00	1 107	

ND = Not Detected

Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3067
	DPW. SELFM-PW-EV			Date Rec'd:		15-Oct-97
	Bldg. 173			Analysis Star	rt:	16-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Con	nplete:	18-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARDI	ſ		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9110
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3067.01	9110-ASTB1	1.00	15.62	94.40	159	ND
3067.02	9110-ASTB2	1.00	15.24	94.71	163	ND
3067.03	9110-ASTN	1.00	15.11	91.64	170	ND
3067.04	9110-ASTE	1.00	15.35	95.23	161	ND
3067.05	9110-ASTS	1.00	15.14	92.44	168	ND
3067.06	9110-ASTW	1.00	15.57	95.54	158	ND
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METHOD BLANK	16-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client:	U.S. Army			Lab. ID # :		3068
	DPW. SELFM-H	PW-EV		Date Rec'd:		15-Oct-97
	Bldg. 173			Analysis Star	rt:	16-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Con	nplete:	18-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARDI	ſ		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9061
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3068.01	9061-ASTB1	1.00	15.62	90.58	166	ND
3068.02	9061-ASTB2	1.00	15.25	90.95	169	ND
3068.03	9061-ASTN	1.00	15.17	90.88	170	ND
3068.04	9061-ASTW	1.00	15.22	91.97	168	ND
3068.05	9061-ASTS	1.00	15.26	93.35	165	ND
3068.06	9061-ASTE	1.00	15.65	92.62	162	205.20
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METHOD BLANK	16-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3106
	DPW. SELFM-	PW-EV		Date Rec'd:		24-Oct-97
	Bldg. 173			Analysis Sta	rt:	25-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	25-Oct-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil			-	
Analyst:	D.DEINHARD	r		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG 9004
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3106.01	9004-DEL1	1.00	15.65	69.09	217	1756.63
3106.03	9004-B1	1.00	15.50	84.21	180	ND
3106.04	9004-B2	1.00	15.67	80.86	185	ND
3106.05	9004-B3	1.00	15.33	64.76	237	340.63
3106.06	9004-SD1	1.00	15.64	80.21	187	237.68
3106.08	9004-SW1	1.00	15.28	84.25	183	257.27
3106.09	9004-SW2	1.00	15.36	82.46	186	1222.32
3106.10	9004-SW3	1.00	15.07	80.98	193	247.19
3106.11	9004-SW4	1.00	15.45	82.33	185	214.44
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METHOD BLANK	24-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3112
	DPW. SELFM-PW-EV			Date Rec'd:		28-Oct-97
	Bldg. 173			Analysis Sta	rt:	29-Oct-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	29-Oct-97
Analysis:	0QA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARD'	Г		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9004
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3112.01	9004-SW5	1.00	15.53	78.07	194	266.86
3112.02	9004-SW6	1.00	15.95	78.01	189	272.50
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METHOD BLANK	29-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright

Laboratory Director

Client :	U.S. Army	Lab. ID # :	3114
	DPW. SELFM-PW-EV	Date Rec'd:	29-Oct-97
	Bldg. 173	Analysis Start:	29-Oct-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	30-Oct-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDG. 9064

						9041, 9033
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3114.01	BL. 9064 B1	1.00	15.59	97.64	154	ND
3114.02	BL. 9064 B2	1.00	15.38	86.26	177	ND
3114.03	BL. 9064 B3	1.00	15.26	97.87	157	ND
3114.04	BL. 9041 B1	1.00	15.61	97.30	155	ND
3114.05	BL. 9041 B2	1.00	15.42	98.28	155	ND
3114.06	BL. 9041 B3	1.00	15.04	93.21	168	ND
3114.07	BL. 9033 B2	1.00	15.44	96.66	157	ND
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METHOD BLANK	29-Oct-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

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Laboratory Director

Client:	U.S. Army	Lab. ID # :	3129
	DPW. SELFM-PW-EV	Date Rec'd:	31-Oct-97
	Bldg. 173	Analysis Start:	03-Nov-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	04-Nov-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	CAMP EVANS

9116, 9001

9012, 9028, 9038

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3129.01	9116-B1	1.00	15.72	97.38	154	ND
3129,02	9001-B1	1.00	15.10	86.93	179	ND
3129.03	9012-B1	1.00	15.29	97.37	158	ND
3129.04	9012-B2	1.00	15.16	96.15	161	ND
3129.05	9028-B1	1.00	15.06	86.22	181	ND
3129.06	9028-B2	1.00	15.82	93.58	159	ND
3129.07	9038-B1	1.00	15.34	87.65	175	ND
3129.08	9038-B1A	1.00	15.89	87.63	169	ND
3129.09	9038-B2	1.00	15.04	85.68	182	ND
3129.10	9038-B3	1.00	15.56	87.95	172	ND
3129.11	9038-B4	1.00	15.62	87.42	172	ND
3129.12	9038-B5	1.00	15.50	87.37	174	ND
3129.13	9038-B6	1.00	15.27	82.76	186	ND
3129.14	9012-B3	1.00	15.43	85.17	179	ND
METHOD BLANK	3-Nov-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client:	U.S. Army	Lab. ID # :	3194
	DPW. SELFM-PW-EV	Date Rec'd:	03-Dec-97
	Bldg. 173	Analysis Start:	04-Dec-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	05-Dec-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #: BLDGS.	
		9028, 9019	

9091

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3194.01	9028(A)-OBS1	1.00	15.39	86.90	176	ND
3194.02	9028(A)-OBS2	1.00	15.35	92.06	166	ND
3194.03	9028(A)-E1	1.00	15.39	91.66	167	ND
3194.04	9028(A)-E2	1.00	15.28	91.55	168	ND
3194.05	9028(A)-N	1.00	15.76	85.51	174	ND
3194.06	9028(A)-S	1.00	15.57	89.27	169	ND
3194.07	9028(A)-W	1.00	15.31	94.91	162	ND
3194.08	9028(A)-DS	1.00	15.55	96.48	157	ND
3194.09	9028(A)-OBS3	1.00	15.85	86.58	171	ND
3194.10	9028(A)-RF	1.00	15.45	87.27	174	ND
3194.11	9019-RF1	1.00	15.84	89.34	166	389.36
3194.12	9019-RF2	1.00	15.37	87.92	174	327.07
3194.13 909	• 9019 (A)-A1	1.00	15.07	87.13	179	902.43
3194.14 909	۱ 8010 (A)-A2	1.00	15.75	87.14	171	ND
3194.15 909	1 9919 (B)-B1	1.00	15.71	97.14	154	ND
3194.16 909	1 3019 (B)-B2	1.00	15.47	79.04	192	ND
3194.17 909	1 +0018(C)-C1	1.00	15.47	94.86	160	ND
3194.18 909	\$\$\$91 (D)-D1	1.00	15.13	96.25	161	ND
METHOD BLANK	4-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

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Daniel K. Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	3206
	DPW. SELFM-PW-EV	Date Rec'd:	10-Dec-97
	Bldg. 173	Analysis Start:	10-Dec-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	11-Dec-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS. 9019

						9090, 9100
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3206.01	9019-EL1	1.00	15.31	84.44	182	3164.29
3206.02	9019-B4	1.00	15.39	98.60	155	ND
3206.03	9019-B5	1.00	15.09	96.02	162	ND
3206.04	9019-W2	1.00	15.19	88.84	174	ND
3206.05	9019-N2	1.00	15.51	84.04	180	ND
3206.06	9019-S2	1.00	15.24	85.59	180	ND
3206.07	9019-E2	1.00	15.14	93.86	165	ND
3206.08	9090-OBS1	1.00	15.04	88.17	177	244.42
3206.09	9090-OBS2	1.00	15.90	88.59	167	228.92
3206.10	9100-OBS1	1.00	15.07	93.93	166	ND
3206.11	9100-OBS2	1.00	15.75	90.31	165	ND
METHOD BLANK	10-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

Client :	U.S. Army			Lab. ID # :		3217
	DPW. SELFM-	PW-EV		Date Rec'd:		11-Dec-97
	Bldg. 173			Analysis Sta	rt:	11-Dec-97
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	12-Dec-97
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil	Soil				
Analyst:	D.DEINHARD'	F		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9090
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3217.01	9090-E1	1.00	15.38	89.83	170	ND
3217.02	9090-E2	1.00	15.38	83.44	183	10886.11
3217.03	9090-B1	1.00	15.29	92.49	166	ND
3217.04	9090-B2	1.00	15.30	98.29	156	ND
3217.05	9090-W	1.00	15.39	97.53	157	2122.06
3217.06	9090-E3	1.00	15.17	95.77	162	ND
3217.07	9090-N	1.00	15.26	97.83	157	ND
3217.08	9090-S	1.00	15.34	97.06	158	ND
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METHOD BLANK	11-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K Wright

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Laboratory Director

Client:	U.S. Army	Lab. ID # :	3249
	DPW. SELFM-PW-EV	Date Rec'd:	19-Dec-97
	Bldg. 173	Analysis Start:	22-Dec-97
	Ft. Monmouth, NJ 07703	Analysis Complete:	23-Dec-97
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	
Analyst:	D. Deinhardt	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDG. 9009

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3249.01	9009-B4	1.00	15.49	93.63	162	ND
3249.02	9009-B5	1.00	15.25	93.74	164	ND
3249.03	9009-NE/W	1.00	15.47	92.88	164	ND
3249.04	9009-NE/E	1.00	15.68	94.28	159	ND
3249.05	9009-NE/N	1.00	15.53	93.05	163	ND
3249.06	9009-NE/S	1.00	15.52	91.02	166	ND
3249.07	9091(A)-A3	1.00	15.41	94.39	162	ND
3249.08	9091(A)-A4	1.00	15.54	92.46	164	ND
3249.09	9091(A)-A5	1.00	15.77	92.87	160	ND
3249.10	9091(A)-A6	1.00	15.51	93.15	163	ND
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METHOD BLANK	22-Dec-97	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

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Laboratory Director

Client :	U.S. Army			Lab. ID # :		3379
	DPW. SELFM-H	PW-EV		Date Rec'd:		03-Mar-98
	Bldg. 173			Analysis Sta	rt:	03-Mar-98
	- Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	04-Mar-98
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARDI			DICAR #:		
Ext. Meth:	Shake			Location #:		Bldg 9089/9012
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3379.01	9089(W)A	1.00	15.56	97.06	156	ND
3379.02	9089(W)B	1.00	15.00	85.51	183	ND
3379.03	9089(W)C	1.00	15.12	86.19	180	ND
3379.04	9089-CTR1	1.00	15.13	84.54	184	2823.87
3379.05	9089-CTR2	1.00	15.65	84.80	177	ND
3379.06	9089-CTR3	1.00	15.39	84.30	181	ND
3379.07	9089-CTR4	1.00	15.48	85.51	178	ND
3379.08	9089-CTR5	1.00	15.37	86.63	176	ND
3379.09	9089-CTR6	1.00	15.60	85.71	176	ND
3379.10	9089-CTR7	1.00	15.49	87.61	173	NĎ
3379.11	9089-CTR8	1.00	15.89	85.53	173	196.06
3379.12	9012(A)-CT1	1.00	15.38	90.01	170	9850.73
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METHOD BLANK	3-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright

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Laboratory Director

Client :	U.S. Army			Lab. ID # :		3400
	DPW. SELFM-I	PW-EV		Date Rec'd:		12-Mar-98
	Bldg. 173			Analysis Sta	rt:	18-Mar-98
	Ft. Monmouth,	NJ 07703		Analysis Cor	nplete:	18-Mar-98
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARD'	ľ		DICAR #:		
Ext. Meth:	Shake			Location #:		Watson Ave.
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3400.01	TP-W.A.(A)1	1.00	15.46	93.52	163	ND
3400.02	TP-W.A.(A)2	1.00	15.43	93.66	163	ND
3400.03	TP-W.A.(B)1	1.00	15.50	94.59	160	ND
3400.04	TP-W.A.(B)2	1.00	15.77	93.03	160	ND
3400.05	TP-W.A.(C)1	1.00	15.31	87.41	176	ND
3400.06	TP-W.A.(C)2	1.00	15.31	87.34	176	ND
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METHOD BLANK	18-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K Wright Laboratory Director

Client :	U.S. Army	Lab. ID # :	3409
	DPW. SELFM-PW-EV	Date Rec'd:	13-Mar-98
	Bldg. 173	Analysis Start:	16-Mar-98
	Ft. Monmouth, NJ 07703	Analysis Complete:	17-Mar-98
Analysis:	OQA-QAM-025	UST Reg. #:	
Matrix:	Soil	Closure #:	•
Analyst:	D.DEINHARDT	DICAR #:	
Ext. Meth:	Shake	Location #:	BLDGS. 9089

						9054
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3409.01	9089-B1	1.00	15.11	83.69	186	810.71
3409.02	9089-B2	1.00	15.35	88.64	173	ND
3409.03	9089-CNFRM1	1.00	15.05	88.21	177	ND
3409.04	9089-B3	1.00	15.32	92.81	165	ND
3409.05	9089-B4	1.00	15.52	92.50	164	ND
3409.06	9089-N	1.00	15.42	85.31	179	ND
3409.07	9089-S	1.00	15.09	87.25	178	ND
3409.08	9089-W	1.00	15.83	88.84	167	ND
3409.09	9089-E	1.00	15.66	93.02	161	ND
3409.10	9089-CNFRM2	1.00	15.69	86.80	173	ND
3409.11	9089-CNFRM3	1.00	15.41	82.98	184	ND
3409.12	TP-9089(UST1)	1.00	15.94	85.19	173	ND
3409.13	TP-9089(UST2)	1.00	15.38	84.49	181	ND
3409.14	9064-RF2	1.00	15.32	90.24	170	213.78
3409.15	9064-RF3	1.00	15.21	89.48	173	275.28
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METHOD BLANK	16-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

MDL = Method Detection Limit

Daniel K. Wright Laboratory Director

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Client :	U.S. Army			Lab. ID # :		3433
	DPW. SELFM-F	PW-EV		Date Rec'd:		26-Mar-98
	Bldg. 173			Analysis Star	rt:	26-Mar-98
	Ft. Monmouth,	NJ 07703		Analysis Con	nplete:	26-Mar-98
Analysis:	OQA-QAM-025			UST Reg. #:		
Matrix:	Soil			Closure #:		
Analyst:	D.DEINHARDI	1		DICAR #:		
Ext. Meth:	Shake			Location #:		BLDG. 9015
Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
3433.01	TP-9015A	1.00	15.71	85.62	175	454.54
3433.02	TP-9015B	1.00	15.14	90.00	172	509.70
3433.03	TP-9015C	1.00	15.04	89.54	175	567.84
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METHOD BLANK	26-Mar-98	1.00	15.00	100.00	157	ND

ND = Not Detected

Daniel K. Wright Laboratory Director

					FIELD ID).	
L h Namas II		DLATILE ORGANICS AN			TP9	043E	
Lab Name: F		0 N 0040]
Project: 9	71251	Case No.: 3010	Location:	Evans S	DG NO.: _		
Matrix: (soil/wa	ter) <u>S</u>	OIL	Lab S	ample ID:	3010.10	<u> </u>	
Sample wt/vol:	1	2.8 (g/ml) G	Lab F	ile ID:	V02038.D		
Level: (low/me	ed) N	1ED	Date	Received:	09/23/97		
% Moisture: no	t dec. 0	 	Date	Analyzed:	09/25/97		
GC Column:	Rtx502.2	2 ID: 0.25 (mm)	Dilutio	on Factor:	1.0		
Soil Extract Vol	lume: 25	5000 (uL)	Soil A	liquot Volu	me: 50		(uL)
		、 /		·			• •
		C	CONCENTRATIO	N UNITS:			
CAS NO.		COMPOUND (ug/L or ug/Kg)	UG/KG		Q	
107028		Acrolein			1400	U	
107131		Acrylonitrile	· ····································		1400	U	
75650		tert-Butyl alcohol			2500	U	
1634044	1	Methyl-tert-Butyl eth	er		590	U	
108203		Di-isopropyl ether			390	U]
		Dichlorodifluorometh	ane		780	<u> </u>	
74-87-3		Chloromethane			200	U	
75-01-4		Vinyl Chloride			590	<u> </u>	
74-83-9		Bromomethane			390	<u> </u>	
75-00-3		Chloroethane			590	U	
75-69-4		Trichlorofluorometha	ine		390	<u> </u>	
75-35-4		1,1-Dichloroethene			200	<u> </u>	
67-64-1		Acetone			390	<u> </u>	
75-15-0		Carbon Disulfide			200	U	
75-09-2		Methylene Chloride			390	<u> </u>	
156-60-	5	trans-1,2-Dichloroet	hene		390	<u> </u>	
75-35-3		1,1-Dichloroethane				<u> </u>	
108-05-	4	Vinyl Acetate			590	<u> </u>	
78-93-3		2-Butanone			090	<u> </u>	
07.00.0		CIS-1,2-DICHIOFOETRE	ne		200	<u> </u>	
67-66-3					200		_
75-55-6	·	Corbon Totrachlorid			300		
20-23-2	, <u></u>		8		200	<u> </u>	
107.06	2	1.2 Dichloroethane			300		
70.01.6	<u> </u>	Trichloroethene			200	<u> </u>	[
79-01-0	<u> </u>	1.2-Dichloropropage			200	<u> </u>	
76-07-0		Bromodichlorometh	2		200	<u> </u>	
110.75	8	2-Chloroethyl vinyl (ather		390		
10061-0	<u></u>	cis-1.3-Dichloropror			200	Ū	
108-10-	<u>.1</u>	4-Methyl-2-Pentano	ne		390	Ū	
108-88-	.3	Toluene			200	Ŭ	
10061-0	02-6	trans-1.3-Dichlorop	opene		390	U	
79-00-5	5	1,1,2-Trichloroethar	 1e		390	U	
127-18-	-4	Tetrachloroethene			200	U	
591-78-	-6	2-Hexanone			390	U	
126-48-	-1	Dibromochlorometh	ane		390	U	
108-90-	-7	Chlorobenzene			200	U	
100-41-	-4	Ethylbenzene			390	<u> </u>	

7/97

		1,	۹ 		FIELD ID).	
	```	VOLATILE ORGANICS	S ANALYSIS DATA SH	EEI	ТРО	0435	
Lab Name:	FMETL		NJDEP #	61			
Project:	971251	Case No.: 30	10 Location: E	vans S	DG No.:		
Matrix: (soil/	water)	SOIL	Lab Sa	mple ID:	3010.10		
Sample wt/v	vol:	12.8 (g/ml) G	Lab File	e ID:	V02038.D		
Level: (low/	med)	MED	Date R	eceived:	09/23/97		
% Moisture:	not dec.	0	Date A	nalyzed:	09/25/97		
GC Column	: Rtx502	2.2 ID: 0.25 (mm	) Dilutior	Factor:	1.0		
Soil Extract	Volume:	25000 (uL)	Soil Ali	quot Volu	me: <u>50</u>		(uL)
			CONCENTRATION	UNITS:			
CAS N	0.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330	-20-7	m+p-Xylenes			590	U	
1330	-20-7	o-Xylene			390	U	
100-4	42-5	Styrene			390	U	
75-25	5-2	Bromoform			390	U	
79-34	4-5	1,1,2,2-Tetrachl	oroethane		390	<u>U</u>	
541-7	73-1	1,3-Dichloroben	zene		590	<u> </u>	
106-4	46-7	1,4-Dichloroben	zene		590	<u> </u>	
95-50	0-1	1,2-Dichloroben	zene		590	U	

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	\ 	VOLATI	_E ORGANI	CS A		AIA שיים	SHEET		ТР	9043G	
Lab Name:	FMEIL				NJDE	Ρ#	13401		L		
Project:	971251		Case No.:	3010	Loc	ation	: Evans	_ SD	G No.:		
Matrix: (soil/wa	ater)	SOIL				Lab	Sample	ID: 3	010.12		
Sample wt/vol		11.5	 (a/ml)	G		l ab	Eile ID:	<u>-</u>	/02042.[	)	
Sample w//voi	•	11.0	(9/11/1)	<u> </u>				-	020 12.		
Level: (low/m	ed)	MED				Dat	e Receiv	ed: [	19/23/97		
% Moisture: n	ot dec.	0				Dat	te Analyz	ed: (	)9/25/97		
GC Column	Rtx502	2.2 ID:	0.25 (m	nm)		Dilu	ution Fact	or:	0.1		
	1	<u></u>	<u> </u>			C al		-			/t
Soil Extract Vo	olume:	25000	(uL)			501	Aliquot	volun	ie. <u>50</u>		(ur)
						грат		те			
					CONCEN			13.		0	
CAS NO.	•	CO	MPOUND		(ug/L or ug	j/Kg)	<u>UG</u> /	KG		Q	
107028	2	Δ	crolein						1500	U	
107020	<u></u>	A	crvlonitrile						1500	Ū	
75650		te	rt-Butyl alco	hol					2800	U	
163404	14	M	ethyl-tert-B	utyl e	ther				650	U	
108203	3	D	i-isopropyl e	ether					430	<u> </u>	
		D	ichlorodifluc	rome	ethane				870	U	
74-87-3	3	С	hlorometha	ne					220	U	
75-01-4	4		inyl Chloride	3					650	<u> </u>	
74-83-9	<u>ə                                    </u>	B	romometha	ne					430	U	
75-00-3	3	C	hloroethane	<b>;</b>					650	U	
75-69-4	4	T	richlorofluor	omet	hane			-	430	<u> </u>	
75-35-4	4	1	<u>,1-Dichloroe</u>	then	e				220	<u> </u>	
67-64-	1	A	cetone	<b>C</b> .1.					430		
75-15-0	0		arbon Disul	fide					420		
75-09-2	2	IV to	enylene U	<u>lioria</u> bloro	ethono				430		_
150-60	2	- <u>u</u>	1 Dichloroe	than.					220		
109.05	<u>э</u>	<u> </u>	invl Acetate						650	<u> </u>	$\neg$
78-03-	2 <u>+</u>	2	-Butanone		· · · · ·				650	- <u>u</u>	
10-33-	<u>0                                    </u>	<u>_</u>	is-1.2-Dichle	proet	hene				220	Ū	
67-66-	3		hloroform						220	U	
75-55-	6	1	1,1-Trichlo	roeth	ane				220	U	
56-23-	5		arbon Tetra	chlo	ride				430	U	
71-43-	2	E	enzene						220	<u> </u>	
107-06	3-2	1	,2-Dichloroe	ethan	e				430	<u> </u>	
79-01-	6	<u> </u>	richloroethe	ene					220		
78-87-	5	1	,2-Dichloro	propa	ine				220		
75-27-	.4		Iromodichlo	rome	thane				220		
110-75	<u>5-8</u>	2	-Chloroethy	<u>(Eviny</u>	/l ether				430		
10061	-01-5	C	IS-1,3-DICN	oropr	орепе						
108-10	<u>J-1</u>		-weinyl-2-F	enta	none				<u>430</u> 220		
108-88	<u>3-3</u>			hlor					<u>770</u>		-+
10061	<u>-02-0</u> 5		1 2. Trichlo	rooth	ргорене апе				430		
19-00-	- <u>.</u>	י   ר	etrachloroe	then	<u>e</u>		<u> </u>		220	<u> </u>	$\neg$
501_7	<u></u>		-Hexanone		<u> </u>				430	U U	
126-45	<u> </u>	[_] Г	Dibromochic	rome	thane				430	Ū	
108-90	<u></u>		Chlorobenze	пе					220	U	
100-4	1-4	E	Ethylbenzen	е					430	U	

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		17	۹		FIELD ID	•	
	١	VOLATILE ORGANICS	S ANALYSIS DATA SI	1661	ТР90	)43G	
Lab Name:	FMETL		NJDEP # _13	461	<u> </u>		i
Project:	971251	Case No.: 30	10 Location:	Evans Sl	DG No.:		
Matrix: (soil/	water)	SOIL	Lab S	ample ID:	3010.12		
Sample wt/vo	ol:	11.5 (g/ml) G	Lab Fi	le ID:	V02042.D		
Level: (low/r	med)	MED	Date I	Received:	09/23/97		
% Moisture:	not dec.	0	Date /	Analyzed:	09/25/97		
GC Column:	Rtx50	2.2 ID: 0.25 (mm)	) Dilutio	n Factor:	1.0		
Soil Extract	Volume:	25000 (uL)	Soil A	liquot Volu	me: <u>50</u>		(uL)
			CONCENTRATIO	N UNITS:			
CAS NO	0.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-	20-7	m+p-Xvlenes			650		
1330-	20-7	o-Xylene			430	U	
100-4	2-5	Styrene			430	- υ	
75-25	5-2	Bromoform			430	<u>U</u>	
79-34	-5	1,1,2,2-Tetrachi	oroethane		430	<u> </u>	
541-7	'3-1	1,3-Dichloroben	zene		650	<u>      U                              </u>	
106-4	6-7	1,4-Dichloroben	zene		650	U	
95-50	)_1	1.2-Dichloroben	zene		650	U	

		1A			FIELD ID	
	,	VOLATILE ORGANICS ANA	LYSIS DATA SHE	:E I	ТВ	-13
Lab Name:	FMETL	·	NJDEP #1346	51		
Project:	971251	Case No.: 3010	Location: Ev	ans SD	G No.:	
- Motrix: (coil/		<u> </u>	Lab San	uple ID: 3	3010.13	
Matrix, (SOIM	water)				/00007 P	
Sample wt/vo	ol:	<u>10.0</u> (g/ml) <u>G</u>	Lab File	ID: _	/02037.D	
Level: (low/r	ned)	MED	Date Re	ceived: (	)9/23/97	
% Moisture:	not dec.	0	Date An	alyzed: (	)9/25/97	
GC Column:	Rtx50	)2.2 ID: 0.25 (mm)	Dilution	Factor:	1.0	
		, , , , , , , , , , , , , , , , ,	Soil Alia	- unt Volun		 /ul
Soil Extract	voiume:	23000 (uL)	Sul Aliq		le. <u>50</u>	(u
		C				
	_					0
CAS NO	Э.	COMPOUND (U	g/L or ug/Kg)	UG/KG		Q
10702	200	Acrolein			1800	U
10702	20 21	Acrylonitrile			1800	U
75650	<u>יי אין אין אין אין אין אין אין אין אין א</u>	tert-Butyl alcohol			3200	U
16340	<u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Methyl-tert-Butyl ethe	r		750	U
10340	19 12	Di-isopropyl ether			500	<u> </u>
10020		Dichlorodifluoromeths			1000	
74.07		Chloromothano			250	
74-87	-3	Visul Chlorido			750	<u> </u>
75-01	-4				500	
74-83	-9	Bromothemane			750	
75-00	-3	Chloroethane			<u> </u>	<u> </u>
75-69	-4	Trichlorofluoromethan	10		500	<u> </u>
75-35	5-4	1,1-Dichloroethene			250	
67-64	-1	Acetone			500	<u> </u>
75-15	5-0	Carbon Disulfide			250	
75-09	3-2	Methylene Chloride			500	0
156-6	<u>80-5</u>	trans-1,2-Dichloroeth	ene		500	<u> </u>
	<u>5-3</u>	1,1-Dichloroethane			250	<u> </u>
108-0	) <u>5-4</u>	Vinyl_Acetate			/50	<u> </u>
78-93	3-3	2-Butanone			750	<u> </u>
		cis-1,2-Dichloroethen	e		250	<u> </u>
67-66	<u>3-3</u>	Chloroform			250	<u>U</u>
75-55	5-6	1,1,1-Trichloroethane	•		250	U
56-23	3-5	Carbon Tetrachloride			500	<u>    U</u>
71-43	3-2	Benzene			250	U
107-0	)6-2	1,2-Dichloroethane			500	U
79-01	1-6	Trichloroethene	<u></u>		250	U
78-87	7-5	1,2-Dichloropropane			250	U
75-27	7-4	Bromodichlorometha	ne		250	<u> </u>
110-7	75-8	2-Chloroethyl vinyl et	her		500	<u> </u>
1006	1-01-5	cis-1,3-Dichloroprope	ene		250	U
108-1	10-1	4-Methyl-2-Pentanon	e		500	U
108-8	88-3	Toluene			250	U
1006	1-02-6	trans-1,3-Dichloropro	pene		500	U
79-00	0-5	1,1,2-Trichloroethane	)		500	U
127-	18-4	Tetrachloroethene			250	U
591-	78-6	2-Hexanone			500	U
126-	48-1	Dibromochlorometha	ine		500	U
108-0	90-7	Chlorobenzene			250	U
100-	<u>41-4</u>	Ethylbenzene			500	U
1 100-	- T I - T			1		

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		1A			FIELD ID	).	
	١	OLATILE ORGANICS	ANALYSIS DATA SH	EET			
Lab Name:	FMETL		NJDEP # _134	61		3-13	
Project:	971251	Case No.: 301	0 Location: E	vans S	DG No.: _		
Matrix: (soil/	water)	SOIL	Lab Sa	mple ID:	3010.13	<u>.</u>	
Sample wt/ve	ol:	10.0 (g/ml) G	Lab File	e ID:	V02037.D		
Level: (low/r	ned)	MED	Date R	eceived:	09/23/97		
% Moisture:	not dec.	0	Date A	nalyzed:	09/25/97		
GC Column:	Rtx502	2.2 ID: 0.25 (mm)	Dilution	Factor:	1.0		
Soil Extract	Volume:	25000 (uL)	Soil Ali	quot Volu	me: <u>50</u>		(uL)
			CONCENTRATION	UNITS:			
CAS NO	D.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-	20-7	m+p-Xylenes			750	U	
1330-	20-7	o-Xylene			500	<u> </u>	
100-4	2-5	Styrene			500	<u> </u>	
75-25	-2	Bromoform			500	U	
79-34	-5	1,1,2,2-Tetrachlo	roethane		500	<u> </u>	
541-7	3-1	1,3-Dichlorobenz	ene		750	<u> </u>	
106-4	6-7	1,4-Dichlorobenz	ene		750	U	
95-50	-1	1,2-Dichlorobenz	ene		750	<u> </u>	

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	1A			FIELD ID	).	
	VOLATILE ORGANICS ANAL	YSIS DATA SI	HEET	(1.	5'-2')	
Lab Name: FMET	······································	_ NJDEP # <u>13</u>	3461	· ·		
Project: 97125	1 Case No.: 3106	Location: I	B9004 SE	OG No.:		
Matrix: (soil/water)	SOIL	Lab S	ample ID:	3106.02		
Sample wt/vol:	<u>11.3</u> (g/ml) <u>G</u>	Lab Fi	lie ID:	V02304.D		
Level: (low/med)	MED	Date F	Received:	10/24/97		
% Moisture: not dec.	0	Date /	Analyzed:	10/24/97		
GC Column: Rtx5	02.2 ID: 0.25 (mm)	Dilutic	on Factor:	1.0		
Soil Extract Volume:	25000 (uL)	Soil A	liquot Volu	ne: 50		(uL)
	、 ,		•			• •
	со	NCENTRATIO	N UNITS:			
CAS NO.	COMPOUND (ug	/L or ug/Kg)	UG/KG		Q	
01101101		0 0/				
71-43-2	Benzene			220	<u> </u>	
108-88-3	Toluene			220	U	
100-41-4	Ethylbenzene			440	U	
1330-20-7	m+p-Xylenes			660	υ	
1330-20-7	o-Xylene			440	U	
107028	Acrolein			1600	U	
107131	Acrylonitrile			1600	U	
75650	tert-Butyl alcohol			2900	U	
1634044	Methyl-tert-Butyl ether			660	U	
108203	Di-isopropyl ether			440	U	
	Dichlorodifluoromethar	าย		890	υ	
74-87-3	Chloromethane			220	U	
75-01-4	Vinvl Chloride			660	U	
74-83-9	Bromomethane			440	υ	
75-00-3	Chloroethane			660	U	
75-69-4	Trichlorofluoromethan	e		440	Ŭ	
75-35-4	1 1-Dichloroethene			220	Ū	
67-64-1	Acetone			440	Ū	
75-15-0	Carbon Disulfide			220	U U	
75-09-2	Methylene Chloride			440	Ū	
156-60-5	trans-1 2-Dichloroethe	ne		440	Ŭ	1
75-35-3	1 1-Dichloroethane		i	220	Ū	
108-05-4	Vinvl Acetate			660	Ū	
78.03.3	2-Butanone			660	U U	
10-30-0	cis-1 2-Dichloroethene			220	ŭ	
67.66.3	Chloroform	· · · · · · · · · · · · · · · · · · ·		220	<u> </u>	
75 55-6	1 1 1-Trichloroethane			220		
<u>70-00-0</u>	Carbon Tetrachloride			440	U U	
107.06.2				440		
70.01.6				220	<del>- </del>	
79-01-0	1 2 Dichloropropage	<b>.</b>		220	<u> </u>	
10-01-0	Bromodichloromethan			220		
10-21-4	2-Chloroethyl vinyl ett	<u></u>		<u></u>	†	
110-70-0				220		
10001-01-5			<u> </u>	<u></u>		
108-10-1		2000		<u>440</u>		
10061-02-6				440		
79-00-5				<u>940</u> 220		
127-18-4				440		
591 <u>-78</u> -6	Z-Hexanone			440		

			1A				FIELD IE	Э.	
Lab Name:	FMETL	OLA I	ILE ORGANICS		)ATA :P#	13461	(1.	5'-2')	
Project:	971251	<b>.</b>	Case No.: 310	06 Loc	atior	n: B9004	SDG No.:		
Matrix: (soil/v	water)	SOIL			La	o Sample ID	3106.02		
Sample wt/vo	ol:	11.3	(g/ml) <u>G</u>		La	b File ID:	V02304.D		
Level: (low/r	ned)	MED			Da	te Received	: 10/24/97		
% Moisture:	not dec.	0			Da	te Analyzed	: 10/24/97		
GC Column:	Rtx502	2.2 ID	: 0.25 (mm)		Dil	ution Factor	1.0		
Soil Extract \	/olume:	25000	(uL)		So	il Aliquot Vo	ume: 50		(uL)
				CONCEN	TRA-				
CAS NO	Э.	C	OMPOUND	(ug/L or ug	g/Kg)		}	Q	
126-4	8-1		Dibromochlorom	ethane			440	U	
108-9	0-7	(	Chlorobenzene				220	<u> </u>	
100-4	2-5		Styrene				440	U	
75-25	-2		Bromoform	<u> </u>			440	U	
79-34	-5	·	1,1,2,2-Tetrachlc	proethane			440	U	
541-7	3-1		1,3-Dichlorobenz	zene			660	<u> </u>	
106-4	6-7	·	1,4-Dichlorobenz	zene			660	U	
95-50	-1		1,2-Dichlorobenz	zene			660	<u> </u>	

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			1A 20. ANIAL X(		OUEET	FIELD ID	<b>)</b> .	
Lah Name'	V	OLATILE ORGANIC	S ANALYS	SIS DATA	13461	(3.	5'-4')	
		Case No 2	\\ \400		- D0004 - C			
Project:	9/1251	Case No.: 3	106	Location	: <u>B9004</u> S	DG NO.: _		<u> </u>
Matrix: (soil/w	vater)	SOIL		Lab	Sample ID:	3106.07		
Sample wt/vo	ol:	11.2 (g/ml)	G	Lab	File ID:	V02305.D		
Lavel: (low/m	and)	MED		Dat	o Received:	10/24/07		
Level. (IOW/II	neu)			Dai	e Necelveu.	10/24/37		
% Moisture: r	not dec.	0		Dat	e Analyzed:	10/24/97		
GC Column:	Rtx502	2.2 ID: 0.25 (mr	n)	Dilu	ition Factor:	1.0		
Soil Extract V	/olume: '	25000 (ul.)		Soi	L Aliquot Volu	ime: 50		fut '
				001	i i alquot voic			(45)
			CONC	CENTRAT	ION UNITS:			
CARNO	<b>`</b>		(ug/l				0	
CASINC		COMPOUND	(ug/r	or ugrity)	00/10		G	
71-43-	2	Benzene				220	υ	
108-88	3-3	Toluene				220	Ų	
100-41	1-4	Ethylbenzene				450	U	
1330-2	20-7	m+p-Xylenes				670	U	
1330-2	20-7	o-Xylene				450	U	_
10702	8	Acrolein				1600	<u> </u>	
10713	1	Acrylonitrile	<u> </u>			1600	<u> </u>	
75650		tert-Butyl alcol	<u>10 </u>			2900		
16340	44	Methyl-tert-Bu	tyl ether			6/0	<u> </u>	
10820	3	Di-Isopropyi et	ner emethene			450		
74.07	~	Dichlorodilluor	omethane			900		
75.01	-3	Vinyl Chlorido	<u> </u>			670		$\neg$
74.83	<u>-4</u>	Bromomethan				450		
74-03-	3	Chloroethane	<u> </u>			670	<u> </u>	$\neg$
75-69	-0	Trichlorofluoro	methane			450	<u> </u>	
75-35	-4	1.1-Dichloroet	hene			220	Ū	
67-64	-1	Acetone				450	U	
75-15	-0	Carbon Disulfi	de			220	U	
75-09-	-2	Methylene Ch	loride			450	U	
156-6	0-5	trans-1,2-Dich	loroethene	· · · · · · · · · · · · · · · · · · ·		450	U	
75-35	-3	1,1-Dichloroet	hane			220	<u> </u>	
108-0	5-4	Vinyl Acetate				670	U	
78-93	-3	2-Butanone				670		_
		cis-1,2-Dichlo	roethene			220		
67-66	-3					220		-
75-55	<u>-6</u>		<u>bernane</u>			220		
56-23	<u>-5</u>	1 2 Dichlered	hono			400		
	6	Trichloroether				220		
79-01	<u>-0</u> '-5	1.2-Dichlorop	ronane			220		
75-27		Bromodichlore	omethane			220	T U	$\neg$
110-7		2-Chloroethvl	vinvl ether			450	Ū	$\neg$
10061	<u></u>	cis-1.3-Dichlo	ropropene			220	Ū	
108-1	0-1	4-Methyl-2-Pe	ntanone			450	U	
10061	1-02-6	trans-1,3-Dich	loroproper	1e		450	U	
79-00	-5	1,1,2-Trichlor	oethane			450	U	
127-1	8-4	Tetrachloroet	nene			220	U	
591-7	'8-6	2-Hexanone				450	U	
		1 <i>A</i>	Ν		FIELD ID	).		
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	١	OLATILE ORGANICS	ANALYSIS DATA SH	IEET				
Lab Name:	FMETL		NJDEP # _134	P# 13461 (3.5'-4')				
Project:	971251	Case No.: 310	06 Location: E	9004 SI	DG No.:			
Matrix: (soil/	water)	SOIL	Lab Sa	imple ID:	3106.07			
Sample wt/vo	ol:	<u>11.2 (g/mi) G</u>	Lab Fil	e ID:	V02305.D			
Levei: (low/r	ned)	MED	Date F	leceived:	10/24/97			
% Moisture: not dec. 0 Date Analyzed: 10/24/97								
GC Column:	Rtx502	2.2 ID: 0.25 (mm)	Dilutio	n Factor:	1.0			
Soil Extract	Volume:	25000 (uL)	Soil Al	iquot Volu	me: <u>50</u>		(uL)	
CAS NO	Э.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q		
126 4	0 1	Dibromochlorom	othano		450			
108-9	0_7	Chlorobenzene	othane		220	<u> </u>		
100-4	<u>2-5</u>	Styrene			450	Ū		
75-25	-2	Bromoform			450	U		
79-34	-5	1,1,2,2-Tetrachlo	proethane		450	U		
541-7	3-1	1,3-Dichloroben:	zene		670	U		
106-4	6-7	1,4-Dichloroben:	zene		670	U		
95-50	-1	1,2-Dichloroben:	zene		670	<u>U</u>		

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

Data File Name	V02347.D	Sample Name	3112.03
Operator	Skelton	Field ID	Trip Blank
Date Acquired	11/3/19-1:1:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	па
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	па
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1.1.1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene	_	· · · · · · · · · · · · · · · · · · ·	not detected	0.51 ug/L	1
107-06-2	1.2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78_ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	па
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	па
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1.2-Dichlorobenzene			not detected	2.75 ug/L	600

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

Data File Name	V02348.D	Sample Name	3112.04
Operator	Skelton	Field ID	Field Blank
Date Acquired	11/ 3/19 -1:2:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	na
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate		1	not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene		ĺ	not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1.1.1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1.2-Dichloroethane		1	not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1.2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	па
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	па
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	па
1330-20-7	o-Xylene	-   ····		not detected	1.92 ug/L	na
100-42-5	Styrene		1	not detected	1.57 ug/L	100
75-25-2	Bromoform		·   · · · · · · · · · · · · · · · · · ·	not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene		1	not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1 2-Dichlorobenzene			not detected	2.75 ug/L	600

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

Data File Name	v02331.d	Sample Name	3112.05
Operator	Skelton	Field ID	9004-EWS
Date Acquired	10/31/19 -1:2:	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
107028	Acrolein			not detected	6.25 ug/L	па
107131	Acrylonitrile			not detected	6.25 ug/L	na
75650	tert-Butyl alcohol			not detected	12.50 ug/L	na
1634044	Methyl-tert-Butyl ether			not detected	2.50 ug/L	na
108203	Di-isopropyl ether			not detected	1.25 ug/L	na
	Dichlorodifluoromethane		ļ	not detected	3.63 uģ/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	па
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	па
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	па
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether		!	not detected	1.05 ug/L	па
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	па
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	па
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	па
1330-20-7	o-Xylene			not detected	1.92 ug/L	па
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

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	V		DRGANICS	ANALYSIS DA	1A :	SHEEI			
TENTA			VELY IDEN	ITIFIED COMP	our	NDS		Trip Pla	nk
Lab Name:	FMETL			Project	<u>(</u>	971251			
NJDEP #	13461	Ca	se No.: <u>311</u>	2 Locat	ion	B.9004	SE	)G No.:	
Matrix: (soil/w	vater)	WATER	_	L	_ab	Sample	ID:	3112.03	
Sample wt/vo	ol:	5.0	(g/ml) <u>M</u> l	<u> </u>	.ab	File ID:		V02347.D	
Level: (low/m	ned)	LOW	-	E	Date	Receive	ed:	10/28/97	
% Moisture: r	not dec.			[	Date	e Analyze	ed:	11/03/97	
GC Column:	RTX-5	<u>02</u> ID: <u>0.</u> 2	25(mm)	[	Dilut	ion Fact	or:	1.0	
Soil Extract V	olume:		_ (uL)	ę	Soil	Aliquot \	/olur	ne:	(uL)
				CONCENTR	ATI		TS:		
Number TICs	found:	0	_	(ug/L or ug/K	g)	UG/	L		
CAS NO.		COMPOL	IND			RT	ES	T. CONC.	Q

			1E	-					
	١	/OLATILE C	RGANICS	ANALYSIS DA	TA S	HEET		FIELD ID	
		TENTATI	VELY IDEN	TIFIED COMP	OUN	DS			
Lab Name:	FMETL			Project	9	71251		Field Bla	ank
NJDEP #	13461	Cas	e No.: <u>31</u>	12 Locat	tion	B.9004	s	DG No.:	
Matrix: (soil/w	/ater)	WATER		1	Lab S	Sample I	D:	3112.04	
Sample wt/vo	d:	5.0	(g/ml) M		Lab F	ile ID:		V02348.D	
Level: (low/m	ned)	LOW			Date	Receive	ed:	10/28/97	
% Moisture: r	not dec.				Date	Analyze	d:	11/03/97	
GC Column:	RTX-5	02 ID: 0.2	5 (mm)		Diluti	on Facto	or:	1.0	
Soil Extract V	olume:		_ (uL)		Soil A	Aliquot V	olui	me:	(uL)
				CONCENTE	RATIC	ON UNIT	S:		
Number TICs	found:	0	_	(ug/L or ug/ł	(g)	UG/L	-		
CAS NO.		COMPOU	ND			RT	ES	T. CONC.	Q

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			1E					
	v	VOLATILE OI	RGANICS AN	ALYSIS DATA	SHEET		FIELD ID	
		TENTATIV	ELY IDENTIF	IED COMPOL	NDS		9004EV	NS
Lab Name: 1					5/1201			
NJDEP #	13461	Case	No.: <u>3112</u>	Location	B.9004	_ SD	G No.:	
Matrix: (soil/wa	ater)	WATER		Lab	Sample I	D: <u>3</u>	112.05	
Sample wt/voi	:	5.0	(g/ml) ML	Lab	File ID:	<u>\</u>	/02331.D	
Level: (low/m	ed)	LOW		Dat	e Receive	ed: 1	0/28/97	
% Moisture: n	ot dec.			Dal	e Analyze	ed: 1	0/31/97	
GC Column:	RTX-5	502 ID: 0.25	5(mm)	Dilu	ution Facto	or: _1	.0	
Soil Extract Vo	olume:		(uL)	Soi	l Aliquot V	/olum	ie:	(uL)
			C		ION UNIT	rs:		
Number TICs	found:	1	-					
CAS NO.		COMPOU	ND		RT	EST	CONC.	Q
1.		unknown hy	/drocarbon		13.81		11	J

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

Data File Name	bn0665.d	Sample Name	3112.04
Operator	Skelton	Field ID	Field Blank
Date Acquired	11/ 5/97 12:34	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine	[		not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine	1		not detected	0.94 ug/L	20
62-53-3	Aniline	1		not detected	0.15 ug/L	
108-95-2	Phenol			not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol	1		not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene	1		not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol	1		not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	0.16 ug/L	600
	2-Methylphenol			not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene	_		not detected	0.25 ug/L	
106-47-8	4-Chloroaniline	<u> </u>		not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	ļ
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	ļ
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate	_		not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene		_	not detected	0.19 ug/L	<u> </u>
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	<u> </u>
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9	Dibenzofuran			not detected	0.32 ug/L	
100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
86-73-7	Fluorene			not detected	0.29 ug/L	300
7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
103-33-3	Azobenzene			not detected	0.80 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
85-01-8	Phenanthrene			not detected	0.18 ug/L	
120-12-7	Anthracene			not detected	0.19 ug/L	2000
84-74-2	Di-n-butylphthalate	20.30	648333	4.29 ug/L	0.23 ug/L	900
206-44-0	Fluoranthene			not detected	0.41 ug/L	300
92-87-5	Benzidine			not detected	1.45 ug/L	50
129-00-0	Pyrene			not detected	0.32 ug/L	200
85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
218-01-9	Chrysene			not detected	0.20 ug/L	20
117-81-7	bis(2-Ethylhexyl)phthalate	25.30	145931	2.13 ug/L	0.51 ug/L	30
117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

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

Data File Name	BN0666.D	Sample Name	3112.05
Operator	Skelton	Field ID	9004-EWS
Date Acquired	11/ 5/97 13:18	Sample Multiplier	1

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
110-86-1	Pyridine			not detected	5.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.94 ug/L	20
62-53-3	Aniline			not detected	0.15 ug/L	
108-95-2	Phenol	1		not detected	0.47 ug/L	4000
111-44-4	bis(2-Chloroethyl)ether			not detected	0.48 ug/L	10
95-57-8	2-Chlorophenol			not detected	0.18 ug/L	40
541-73-1	1,3-Dichlorobenzene			not detected	0.15 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	0.23 ug/L	75
100-51-6	Benzyl alcohol			not detected	0.18 ug/L	
95-50-1	1,2-Dichlorobenzene	1		not detected	0.16 ug/L	600
	2-Methylphenol	1		not detected	0.14 ug/L	
108-60-1	bis(2-chloroisopropyl)ether			not detected	0.61 ug/L	300
	4-Methylphenol			not detected	0.14 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	0.36 ug/L	20
67-72-1	Hexachloroethane			not detected	0.33 ug/L	10
98-95-3	Nitrobenzene			not detected	0.46 ug/L	10
78-59-1	Isophorone			not detected	0.35 ug/L	100
88-75-5	2-Nitrophenol			not detected	0.23 ug/L	
105-67-9	2,4-Dimethylphenol			not detected	0.27 ug/L	100
111-91-1	bis(2-Chloroethoxy)methane			not detected	0.46 ug/L	
120-83-2	2,4-Dichlorophenol			not detected	0.12 ug/L	20
65-85-0	Benzoic Acid			not detected	0.26 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	0.25 ug/L	9
91-20-3	Naphthalene			not detected	0.25 ug/L	
106-47-8	4-Chloroaniline			not detected	0.19 ug/L	
87-68-3	Hexachlorobutadiene			not detected	0.38 ug/L	1
59-50-7	4-Chloro-3-methylphenol			not detected	0.18 ug/L	
91-57-6	2-Methylnaphthalene			not detected	0.16 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	1.50 ug/L	50
88-06-2	2,4,6-Trichlorophenol			not detected	0.42 ug/L	20
	2,4,5-Trichlorophenol			not detected	0.31 ug/L	700
91-58-7	2-Chloronaphthalene			not detected	0.32 ug/L	
88-74-4	2-Nitroaniline			not detected	0.21 ug/L	
131-11-3	Dimethylphthalate			not detected	0.18 ug/L	7000
208-96-8	Acenaphthylene			not detected	0.19 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	0.31 ug/L	
99-09-2	3-Nitroaniline			not detected	0.26 ug/L	
83-32-9	Acenaphthene			not detected	0.26 ug/L	400
51-28-5	2,4-Dinitrophenol			not detected	0.69 ug/L	40

132-64-9         Dibenzofuran         not detected         0.32 ug/L           100-02-7         4-Nitrophenol         not detected         0.27 ug/L         10           121-14-2         2,4-Dinitrotoluene         not detected         0.36 ug/L         10           84-66-2         Diethylphthalate         not detected         0.82 ug/L         5000           86-73-7         Fluorene         not detected         0.23 ug/L         300           7005-72-3         4-Chlorophenyl-phenylether         not detected         0.31 ug/L         300           100-01-6         4-Nitrosodiphenyl-phenylether         not detected         0.31 ug/L         20           103-3-3         Azobenzene         not detected         0.32 ug/L         20           101-55-3         4-Bromophenyl-phenylether         not detected         0.80 ug/L         10           118-74-1         Hexachlorophenol         not detected         0.80 ug/L         1           187-74-1         Hexachlorophenol         not detected         0.80 ug/L         1           101-55-3         Pentachlorophenol         not detected         0.80 ug/L         1           120-12-7         Anfiracene         not detected         0.18 ug/L         10           120-12-7			<u> </u>	1		0.20	
100-02-74-Nitrophenolnot detected $0.27$ ug/L121-14-22,4-Dinitrotoluenenot detected $0.36$ ug/L500084-66-2Diethylphtalatenot detected $0.82$ ug/L500086-73-7Fluorenenot detected $0.29$ ug/L3007005-72-34-Chlorophenyl-phenylethernot detected $0.31$ ug/L100-01-64-Nitroanlinenot detected $0.90$ ug/L334-52-14,6-Dinitro-2-methylphenolnot detected $0.41$ ug/L86-30-6n-Nitrosodiphenylaminenot detected $0.80$ ug/L101-55-34-Bromophenyl-phenylethernot detected $0.80$ ug/L101-55-34-Bromophenyl-phenylethernot detected $0.80$ ug/L118-74-1Hexachlorobenzennot detected $0.81$ ug/L118-74-1Hexachlorobenzennot detected $0.18$ ug/L120-12-7Anthracenenot detected $0.18$ ug/L120-12-7Anthracenenot detected $0.41$ ug/L200386 ug/L $0.23$ ug/L900206-44-0Fluoranthenenot detected $0.41$ ug/L120-12-7Benzidinenot detected $0.41$ ug/L120-12-7Anthracenenot detected $0.41$ ug/L120-12-7Anthracenenot detected $0.41$ ug/L120-12-7Anthracenenot detected $0.41$ ug/L120-12-7Anthracenenot detected $0.18$ ug/L120-12-7Anthracenenot detected $0.12$ ug/L120-12-7	132-64-9	Dibenzofuran	<b> </b>		not detected	0.32 ug/L	
121-14-22,4-Dinitrotoluenenot detected0.36 ug/L1084-66-2Diethylphthalatenot detected0.82 ug/L500086-73-7Fluorenenot detected0.29 ug/L3007005-72-34-Chlorophenyl-phenylethernot detected0.90 ug/L100-01-64-Nitroanilinenot detected0.90 ug/L534-52-14,6-Dinitro-2-methylphenolnot detected0.44 ug/L86-30-6n-Nitrosodiphenylaminenot detected0.82 ug/L101-55-34-Bromophenyl-phenylethernot detected0.80 ug/L101-55-34-Bromophenyl-phenylethernot detected0.82 ug/L101-55-34-Bromophenyl-phenylethernot detected0.82 ug/L118-74-1Hexachlorobenzenenot detected0.82 ug/L120-12-7Anthracenenot detected0.18 ug/L120-12-7Anthracenenot detected0.19 ug/L200084-74-2Di-n-butylphthalate20.305831023.86 ug/L0.23 ug/L20003.86 ug/L0.02 ug/L30020-6-44-0Fluoranthenenot detected0.44 ug/L30092-87-5Benzidinenot detected0.22 ug/L20085-68-7Butylbenzylphthalatenot detected0.22 ug/L1091-94-13,3'-Dichlorobenzidinenot detected0.23 ug/L2017-81-7bis(2-Ethylhexyl)phthalatenot detected0.23 ug/L1019-94-13,3'-Dichlorobenzidinenot detected0.23 ug/L	100-02-7	4-Nitrophenol			not detected	0.27 ug/L	
84-66-2Diethylphthalatenot detected $0.82 \text{ ug/L}$ $5000$ 86-73-7Fluorenenot detected $0.29 \text{ ug/L}$ $300$ 7005-72-34-Chlorophenyl-phenylethernot detected $0.31 \text{ ug/L}$ $300$ 100-01-64-Nitroanilinenot detected $0.90 \text{ ug/L}$ $34452-1$ $4,6-Dinitro-2-methylphenolnot detected0.29 \text{ ug/L}2000 \text{ ug/L}86-30-6n-Nitrosodiphenylaminenot detected0.23 \text{ ug/L}202013-33-3Azobenzenenot detected0.80 \text{ ug/L}20103-33-3101-55-34-Bornophenyl-phenylethernot detected0.85 \text{ ug/L}118-74-1Hexachlorobenzene100 \text{ detected}0.85 \text{ ug/L}11687-86-5Pentachlorobenzenenot detected0.18 \text{ ug/L}11687-86-5900 \text{ ug/L}200084-74-2Di-n-butylphthalate20.305831023.86 \text{ ug/L}0.23 \text{ ug/L}30092-87-5Benzolinenot detected0.41 \text{ ug/L}30092-87-5Benzidinenot detected0.32 \text{ ug/L}10095-65-3Benzolajanthracenenot detected0.23 \text{ ug/L}10091-90-0Pyrenenot detected0.22 \text{ ug/L}10091-94-13,3^*-Dichlorobenzidinenot detected0.23 \text{ ug/L}20017-81-7Bit/2-Eithylhexyl)phthalatenot detected0.23 \text{ ug/L}20017-81-7bis/2-Eithylhexyl)phthalatenot detected0.23 $	121-14-2	2,4-Dinitrotoluene			not detected	0.36 ug/L	10
86-73-7         Fluorene         not detected $0.29 \text{ ug/L}$ 300           7005-72-3         4-Chlorophenyl-phenylether         not detected $0.31 \text{ ug/L}$ 100-01-6         4-Nitroaniline         not detected $0.90 \text{ ug/L}$ 105-01-10-2-methylphenol         not detected $0.44 \text{ ug/L}$ 101-35-3 $4.50 \text{-Dinitro-2-methylphenol}$ not detected $0.23 \text{ ug/L}$ 20         103-33-3         Azobenzene         not detected $0.80 \text{ ug/L}$ 101-55-3 $4.9 \text{romophenyl-phenylether}$ not detected $0.80 \text{ ug/L}$ 101           101-55-3 $4.9 \text{romophenyl-phenylether}$ not detected $0.82 \text{ ug/L}$ 10           118-74-1         Hexachlorobenzene         not detected $0.82 \text{ ug/L}$ 10           87.86-5         Pentachlorophenol         not detected $0.18 \text{ ug/L}$ 10           120-12-7         Antracene         not detected $0.19 \text{ ug/L}$ 2000           84-74-2         Di-n-butylphthalate         20.30         583102         3.86 ug/L $0.32 \text{ ug/L}$ 300           129-00-0         Pyrene         not detected $0.47 \text{ ug/L}$ 300         35-63-7         Butylbenzylphthalate	84-66-2	Diethylphthalate			not detected	0.82 ug/L	5000
7005-72-3         4-Chlorophenyl-phenylether         not detected $0.31 \text{ ug/L}$ 100-01-6         4-Nitroaniline         not detected         0.90 ug/L           534-52-1         4,6-Dinitro-2-methylphenol         not detected         0.23 ug/L         20           86-30-6         n-Nitrosodiphenylamine         not detected         0.23 ug/L         20           103-33-3         Azobenzene         not detected         0.80 ug/L         10           101-55-3         4-Bromophenyl-phenylether         not detected         0.82 ug/L         10           87-86-5         Pentachlorophenol         not detected         0.18 ug/L         10           87-86-5         Pentachlorophenol         not detected         0.18 ug/L         12001           120-12-7         Anthracene         not detected         0.18 ug/L         12000           84-74-2         Di-n-butylphthalate         20.30         583102         3.86 ug/L         0.23 ug/L         900           206-44-0         Fluoranthene         not detected         0.41 ug/L         300         92.87-5         Benzidine         not detected         0.32 ug/L         200           85-55-3         Benzo[a]anthracene         not detected         0.32 ug/L         100	86-73-7	Fluorene			not detected	0.29 ug/L	300
100-01-64-Nitroanilinenot detected $0.90  ug/L$ $534-52-1$ $4,6-Dinitro-2-methylphenol$ not detected $0.23  ug/L$ $0.23  ug/L$ $86-30-6$ $n$ -Nitrosodiphenylaminenot detected $0.23  ug/L$ $20$ $103-33-3$ Azobenzenenot detected $0.80  ug/L$ $20$ $101-55-3$ $4$ -Bromophenyl-phenylethernot detected $0.80  ug/L$ $10$ $101-55-3$ $4$ -Bromophenyl-phenylethernot detected $0.82  ug/L$ $10$ $118-74-1$ Hexachlorobenzenenot detected $0.82  ug/L$ $10$ $87-86-5$ Pentachlorophenolnot detected $0.18  ug/L$ $10$ $120-12-7$ Anthracenenot detected $0.19  ug/L$ $2000$ $84-74-2$ Di-n-butylphthalate $20.30$ $583102$ $3.86  ug/L$ $0.23  ug/L$ $900$ $206-44-0$ Fluoranthenenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.42  ug/L$ $10$ $91-90-0$ Pyrenenot detected $0.42  ug/L$ $10$ $91-90-0$ Pyrenenot detected $0.42  ug/L$ $10$ $91-94-1$ $3,3'-Dichlorobenzidinenot detected0.22  ug/L1091-94-13,3'-Dichlorobenzidinenot detected0.21  ug/L20117-81-0Di-n-octylphthalatenot detected0.21  ug/L20$	7005-72-3	4-Chlorophenyl-phenylether			not detected	0.31 ug/L	
534-52-14,6-Dinitro-2-methylphenolnot detected $0.44  ug/L$ $86-30-6$ n-Nitrosodiphenylaminenot detected $0.23  ug/L$ $20$ $103-33-3$ Azobenzenenot detected $0.80  ug/L$ $20$ $101-55-3$ 4-Bromophenyl-phenylethernot detected $0.80  ug/L$ $10$ $118-74-1$ Hexachlorobenzenenot detected $0.82  ug/L$ $10$ $87.86-5$ Pentachlorophenolnot detected $0.82  ug/L$ $10$ $120-12-7$ Anthracenenot detected $0.18  ug/L$ $1$ $120-12-7$ Anthracenenot detected $0.18  ug/L$ $2000$ $84-74-2$ Di-n-butylphthalate $20.30$ $583102$ $3.86  ug/L$ $0.23  ug/L$ $2000$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $100$ $56-55-3$ Benzo[a]anthracenenot detected $0.22  ug/L$ $100$ $91-94-1$ $3.3$ -Dichlorobenzidinenot detected $0.22  ug/L$ $100$ $91-94-1$ $3.3$ -Dichlorobenzidinenot detected $0.20  ug/L$ $20$ $117-84-0$ Di-n-octylphthalatenot detected $0.32  ug/L$ $10$ $20-99-2$ Benzo[k]fluoranthenenot detected $0.32  ug/L$ $20$ $117-84-0$ Di-n-octylphthalatenot detected $0.32  ug/L$ $20$ <	100-01-6	4-Nitroaniline			not detected	0.90 ug/L	
86-30-6         n-Nitrosodiphenylamine         not detected         0.23 ug/L         20           103-33-3         Azobenzene         not detected         0.80 ug/L         101-55-3         4-Bromophenyl-phenylether         not detected         0.80 ug/L         11           101-55-3         4-Bromophenyl-phenylether         not detected         0.82 ug/L         10           87-86-5         Pentachlorobenzene         not detected         0.82 ug/L         1           85-01-8         Phenanthrene         not detected         0.18 ug/L         1           120-12-7         Anthracene         not detected         0.19 ug/L         2000           84-74-2         Di-n-butylphthalate         20.30         583102         3.86 ug/L         0.23 ug/L         900           206-44-0         Fluoranthene         not detected         0.41 ug/L         300           92-87-5         Benzidine         not detected         0.32 ug/L         200           85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         100           91-94-1         3,3'Dichlorobenzidine         not detected         0.22 ug/L         100	534-52-1	4,6-Dinitro-2-methylphenol			not detected	0.44 ug/L	
103-33-3Azobenzenenot detected $0.80 \text{ ug/L}$ 101-55-34-Bromophenyl-phenylethernot detected $0.55 \text{ ug/L}$ 118-74-1Hexachlorobenzenenot detected $0.82 \text{ ug/L}$ 1087-86-5Pentachlorophenolnot detected $0.82 \text{ ug/L}$ 1087-86-5Pentachlorophenolnot detected $0.18 \text{ ug/L}$ 10120-12-7Anthracenenot detected $0.18 \text{ ug/L}$ 200084-74-2Di-n-butylphthalate20.30583102 $3.86 \text{ ug/L}$ $0.23 \text{ ug/L}$ 900206-44-0Fluoranthenenot detected $0.41 \text{ ug/L}$ 30092-87-5Benzidinenot detected $0.32 \text{ ug/L}$ 20085-68-7Butylbenzylphthalatenot detected $0.32 \text{ ug/L}$ 20085-68-7Butylbenzylphthalatenot detected $0.22 \text{ ug/L}$ 1091-94-13,3'-Dichlorobenzidinenot detected $0.22 \text{ ug/L}$ 1091-94-1bis(2-Ethylhexyl)phthalatenot detected $0.20 \text{ ug/L}$ 20117-81-7bis(2-Ethylhexyl)phthalatenot detected $0.37 \text{ ug/L}$ 10205-99-2Benzo[5]fluoranthenenot detected $0.32 \text{ ug/L}$ 20117-84-0Di-n-octylphthalatenot detected $0.32 \text{ ug/L}$ 20117-84-0Di-n-octylphthalatenot detected $0.32 \text{ ug/L}$ 10205-99-2Benzo[5]fluoranthenenot detected $0.31 \text{ ug/L}$ 20117-81-7bis(2-Ethylhexyl)phthalatenot	86-30-6	n-Nitrosodiphenylamine			not detected	0.23 ug/L	20
101-55-3 $4$ -Bromophenyl-phenylether         not detected $0.55  ug/L$ $118-74-1$ Hexachlorobenzene         not detected $0.82  ug/L$ $10$ $87-86-5$ Pentachlorophenol         not detected $1.08  ug/L$ $1$ $85-01-8$ Phenanthrene         not detected $0.18  ug/L$ $1$ $120-12-7$ Anthracene         not detected $0.18  ug/L$ $2000$ $84-74-2$ Di-n-butylphthalate $20.30$ $583102$ $3.86  ug/L$ $0.23  ug/L$ $900$ $206-44-0$ Fluoranthene         not detected $0.41  ug/L$ $300$ $92-87-5$ Benzidine         not detected $0.41  ug/L$ $300$ $92-87-5$ Benzidine         not detected $0.32  ug/L$ $200$ $92-87-5$ Benzi	103-33-3	Azobenzene			not detected	0.80 ug/L	
118-74-1Hexachlorobenzenenot detected $0.82 \text{ ug/L}$ 1087-86-5Pentachlorophenolnot detected $1.08 \text{ ug/L}$ 185-01-8Phenanthrenenot detected $0.18 \text{ ug/L}$ 1120-12-7Anthracenenot detected $0.19 \text{ ug/L}$ 200084-74-2Di-n-butylphthalate20.30583102 $3.86 \text{ ug/L}$ $0.23 \text{ ug/L}$ 900206-44-0Fluoranthenenot detected $0.41 \text{ ug/L}$ 30092-87-5Benzidinenot detected $0.41 \text{ ug/L}$ 50129-00-0Pyrenenot detected $0.32 \text{ ug/L}$ 20085-68-7Butylbenzylphthalatenot detected $0.22 \text{ ug/L}$ 10056-55-3Benzo[a]anthracenenot detected $0.22 \text{ ug/L}$ 10091-94-1 $3,3'$ -Dichlorobenzidinenot detected $0.20 \text{ ug/L}$ 200117-81-7bis(2-Ethylhexyl)phthalatenot detected $0.20 \text{ ug/L}$ 30117-84-0Di-n-octylphthalatenot detected $0.32 \text{ ug/L}$ 30117-84-0Di-n-octylphthalatenot detected $0.32 \text{ ug/L}$ 30117-84-0Di-n-octylphthalatenot detected $0.32 \text{ ug/L}$ 20205-99-2Benzo[b]fluoranthenenot detected $0.32 \text{ ug/L}$ 20193-39-5Indeno[1,2,3-cd]pyrenenot detected $0.31 \text{ ug/L}$ 20193-39-5Indeno[1,2,3-cd]pyrenenot detected $0.23 \text{ ug/L}$ 20193-39-5Indeno[1,2,3-cd]pyrenen	101-55-3	4-Bromophenyl-phenylether			not detected	0.55 ug/L	
87-86-5Pentachlorophenolnot detected $1.08  ug/L$ $1$ $85-01-8$ Phenanthrenenot detected $0.18  ug/L$ $2000$ $120-12-7$ Anthracenenot detected $0.19  ug/L$ $2000$ $84-74-2$ Di-n-butylphthalate $20.30$ $583102$ $3.86  ug/L$ $0.23  ug/L$ $900$ $206-44-0$ Fluoranthenenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.42  ug/L$ $50$ $129-00-0$ Pyrenenot detected $0.32  ug/L$ $200$ $85-68-7$ Butylbenzylphthalatenot detected $0.47  ug/L$ $100$ $56-55-3$ Benzo[a]anthracenenot detected $0.22  ug/L$ $10$ $91-94-1$ $3,3'$ -Dichlorobenzidinenot detected $0.22  ug/L$ $20$ $117-81-7$ bis(2-Ethylhexyl)phthalatenot detected $0.20  ug/L$ $30$ $117-84-0$ Di-n-octylphthalatenot detected $0.82  ug/L$ $30$ $117-84-0$ Di-n-octylphthalatenot detected $0.32  ug/L$ $100$ $205-99-2$ Benzo[b]fluoranthenenot detected $0.32  ug/L$ $20$ $207-08-9$ Benzo[k]fluoranthenenot detected $0.31  ug/L$ $20$ $207-08-9$ Benzo[k]fluoranthenenot detected $0.31  ug/L$ $20$ $205-99-2$ Benzo[k]fluoranthenenot detected $0.31  ug/L$ $20$	118-74-1	Hexachlorobenzene			not detected	0.82 ug/L	10
85-01-8Phenanthrenenot detected $0.18  ug/L$ $120-12-7$ Anthracenenot detected $0.19  ug/L$ $2000$ $84-74-2$ Di-n-butylphthalate $20.30$ $583102$ $3.86  ug/L$ $0.23  ug/L$ $900$ $206-44-0$ Fluoranthenenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $0.42  ug/L$ $50$ $129-00-0$ Pyrenenot detected $0.32  ug/L$ $200$ $85-68-7$ Butylbenzylphthalatenot detected $0.47  ug/L$ $100$ $56-55-3$ Benzo[a]anthracenenot detected $0.22  ug/L$ $10$ $91-94-1$ $3,3'-Dichlorobenzidinenot detected0.20  ug/L20117-81-7bis(2-Ethylhexyl)phthalatenot detected0.51  ug/L30117-84-0Di-n-octylphthalatenot detected0.32  ug/L100205-99-2Benzo[b]fluoranthenenot detected0.32  ug/L10205-99-2Benzo[k]fluoranthenenot detected0.31  ug/L20117-84-0Di-n-octylphthalatenot detected0.32  ug/L10205-99-2Benzo[k]fluoranthenenot detected0.31  ug/L20109-39-55Indeno[1,2,3-cd]pyrenenot detected0.31  ug/L20$	87-86-5	Pentachlorophenol			not detected	1.08 ug/L	1
120-12-7         Anthracene         not detected         0.19 ug/L         2000           84-74-2         Di-n-butylphthalate         20.30         583102         3.86 ug/L         0.23 ug/L         900           206-44-0         Fluoranthene         not detected         0.41 ug/L         300           92-87-5         Benzidine         not detected         0.41 ug/L         300           129-00-0         Pyrene         not detected         0.32 ug/L         200           85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.22 ug/L         60           218-01-9         Chrysene         not detected         0.51 ug/L         30           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.32 ug/L         20           207-08-9         Benzo[k]fluoranthene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.31 ug/L <td>85-01-8</td> <td>Phenanthrene</td> <td></td> <td></td> <td>not detected</td> <td>0.18 ug/L</td> <td></td>	85-01-8	Phenanthrene			not detected	0.18 ug/L	
84-74-2         Di-n-butylphthalate         20.30         583102         3.86 ug/L         0.23 ug/L         900           206-44-0         Fluoranthene         not detected         0.41 ug/L         300           92-87-5         Benzidine         not detected         1.45 ug/L         50           129-00-0         Pyrene         not detected         0.32 ug/L         200           85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.46 ug/L         60           218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.32 ug/L         10           205-99-2         Benzo[k]fluoranthene         not detected         0.32 ug/L         2           50-32-8         Benzo[k]fluoranthene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.31 ug	120-12-7	Anthracene			not detected	0.19 ug/L	2000
206-44-0Fluoranthenenot detected $0.41  ug/L$ $300$ $92-87-5$ Benzidinenot detected $1.45  ug/L$ $50$ $129-00-0$ Pyrenenot detected $0.32  ug/L$ $200$ $85-68-7$ Butylbenzylphthalatenot detected $0.47  ug/L$ $100$ $56-55-3$ Benzo[a]anthracenenot detected $0.22  ug/L$ $10$ $91-94-1$ $3,3'-Dichlorobenzidinenot detected0.46  ug/L60218-01-9Chrysenenot detected0.20  ug/L20117-81-7bis(2-Ethylhexyl)phthalatenot detected0.51  ug/L30117-84-0Di-n-octylphthalatenot detected0.37  ug/L100205-99-2Benzo[b]fluoranthenenot detected0.32  ug/L20207-08-9Benzo[k]fluoranthenenot detected0.32  ug/L20193-39-5Indeno[1,2,3-cd]pyrenenot detected0.31  ug/L20193-39-5Indeno[1,2,3-cd]pyrenenot detected0.28  ug/L20191-24-2Benzo[g,h,i]perylenenot detected0.28  ug/L20$	84-74-2	Di-n-butylphthalate	20.30	583102	3.86 ug/L	0.23 ug/L	900
92-87-5         Benzidine         not detected         1.45 ug/L         50           129-00-0         Pyrene         not detected         0.32 ug/L         200           85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.46 ug/L         60           218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.82 ug/L         100           205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.32 ug/L         2           50-32-8         Benzo[a]pyrene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20	206-44-0	Fluoranthene			not detected	0.41 ug/L	300
129-00-0         Pyrene         not detected         0.32 ug/L         200           85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.46 ug/L         60           218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.32 ug/L         100           205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.32 ug/L         2           50-32-8         Benzo[k]fluoranthene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L         20<	92-87-5	Benzidine			not detected	1.45 ug/L	50
85-68-7         Butylbenzylphthalate         not detected         0.47 ug/L         100           56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.46 ug/L         60           218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.82 ug/L         100           205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.31 ug/L         2           50-32-8         Benzo[k]fluoranthene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L         20	129-00-0	Pyrene			not detected	0.32 ug/L	200
56-55-3         Benzo[a]anthracene         not detected         0.22 ug/L         10           91-94-1         3,3'-Dichlorobenzidine         not detected         0.46 ug/L         60           218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.82 ug/L         100           205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.31 ug/L         20           50-32-8         Benzo[a]pyrene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L         20	85-68-7	Butylbenzylphthalate			not detected	0.47 ug/L	100
91-94-1       3,3'-Dichlorobenzidine       not detected       0.46 ug/L       60         218-01-9       Chrysene       not detected       0.20 ug/L       20         117-81-7       bis(2-Ethylhexyl)phthalate       not detected       0.51 ug/L       30         117-84-0       Di-n-octylphthalate       not detected       0.82 ug/L       100         205-99-2       Benzo[b]fluoranthene       not detected       0.37 ug/L       10         207-08-9       Benzo[k]fluoranthene       not detected       0.31 ug/L       20         50-32-8       Benzo[a]pyrene       not detected       0.79 ug/L       20         193-39-5       Indeno[1,2,3-cd]pyrene       not detected       0.28 ug/L       20         53-70-3       Dibenz[a,h]anthracene       not detected       0.28 ug/L       20         191-24-2       Benzo[g,h,i]perylene       not detected       0.40 ug/L	56-55-3	Benzo[a]anthracene			not detected	0.22 ug/L	10
218-01-9         Chrysene         not detected         0.20 ug/L         20           117-81-7         bis(2-Ethylhexyl)phthalate         not detected         0.51 ug/L         30           117-84-0         Di-n-octylphthalate         not detected         0.82 ug/L         100           205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.32 ug/L         2           50-32-8         Benzo[a]pyrene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L         20	91-94-1	3,3'-Dichlorobenzidine			not detected	0.46 ug/L	60
117-81-7bis(2-Ethylhexyl)phthalatenot detected0.51 ug/L30117-84-0Di-n-octylphthalatenot detected0.82 ug/L100205-99-2Benzo[b]fluoranthenenot detected0.37 ug/L10207-08-9Benzo[k]fluoranthenenot detected0.32 ug/L250-32-8Benzo[a]pyrenenot detected0.31 ug/L20193-39-5Indeno[1,2,3-cd]pyrenenot detected0.79 ug/L2053-70-3Dibenz[a,h]anthracenenot detected0.28 ug/L20191-24-2Benzo[g,h,i]perylenenot detected0.40 ug/L	218-01-9	Chrysene			not detected	0.20 ug/L	20
117-84-0Di-n-octylphthalatenot detected0.82 ug/L100205-99-2Benzo[b]fluoranthenenot detected0.37 ug/L10207-08-9Benzo[k]fluoranthenenot detected0.32 ug/L250-32-8Benzo[a]pyrenenot detected0.31 ug/L20193-39-5Indeno[1,2,3-cd]pyrenenot detected0.79 ug/L2053-70-3Dibenz[a,h]anthracenenot detected0.28 ug/L20191-24-2Benzo[g,h,i]perylenenot detected0.40 ug/L	117-81-7	bis(2-Ethylhexyl)phthalate			not detected	0.51 ug/L	30
205-99-2         Benzo[b]fluoranthene         not detected         0.37 ug/L         10           207-08-9         Benzo[k]fluoranthene         not detected         0.32 ug/L         2           50-32-8         Benzo[a]pyrene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L         20	117-84-0	Di-n-octylphthalate			not detected	0.82 ug/L	100
207-08-9Benzo[k]fluoranthenenot detected0.32 ug/L250-32-8Benzo[a]pyrenenot detected0.31 ug/L20193-39-5Indeno[1,2,3-cd]pyrenenot detected0.79 ug/L2053-70-3Dibenz[a,h]anthracenenot detected0.28 ug/L20191-24-2Benzo[g,h,i]perylenenot detected0.40 ug/L	205-99-2	Benzo[b]fluoranthene			not detected	0.37 ug/L	10
50-32-8         Benzo[a]pyrene         not detected         0.31 ug/L         20           193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L	207-08-9	Benzo[k]fluoranthene			not detected	0.32 ug/L	2
193-39-5         Indeno[1,2,3-cd]pyrene         not detected         0.79 ug/L         20           53-70-3         Dibenz[a,h]anthracene         not detected         0.28 ug/L         20           191-24-2         Benzo[g,h,i]perylene         not detected         0.40 ug/L	50-32-8	Benzo[a]pyrene			not detected	0.31 ug/L	20
53-70-3Dibenz[a,h]anthracenenot detected0.28 ug/L20191-24-2Benzo[g,h,i]perylenenot detected0.40 ug/L	193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.79 ug/L	20
191-24-2 Benzo[g,h,i]perylene not detected 0.40 ug/L	53-70-3	Dibenz[a,h]anthracene			not detected	0.28 ug/L	20
	191-24-2	Benzo[g,h,i]perylene			not detected	0.40 ug/L	

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#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID TENTATIVELY IDENTIFIED COMPOUNDS

EST. CONC.

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						Eiold Dia	nk
Lab Name:	FMETL			Lab Code 1346	51		
Project	971251	C:	ase No.: <u>3112</u>	Location Blo	lg90 SI	DG No.:	
Matrix: (soil/v	vater)	WATER		Lab Sam	nple ID:	3112.04	
Sample wt/vo	ol:	1000	(g/ml) ML	Lab File	ID:	BN0665.D	
Level: (low/r	ned)	LOW		Date Re	ceived:	10/28/97	
% Moisture:		de	canted: (Y/N)	N Date An	alyzed:	11/05/97	
Concentrated	d Extract	Volume:	1000 (uL)	Dilution	Factor:	1.0	
Injection Volu	ume: <u>1.</u>	0 (uL)		Soil Aliq	uot Volu	me: <u>1</u>	(uL)
GPC Cleanu	p: (Y/N)	<u>N</u>	_ pH: _7				
				CONCENTRATI	ON UNI	TS:	
Number TIC:	s found:	0		(ug/L or ug/Kg)	UG/	L	

RT

COMPOUND NAME

CAS NUMBER

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET FIELD ID

		1 - 1 - 1 - 1 - 1 - 1				THE	
Lab Name:	FMETL			Lab C	ode 13461	EVV5	
Project	971251	Ca	se No.: 3112	Loc	ation <u>Bldg90</u> S	DG No.:	
Matrix: (soil/	water)	WATER			Lab Sample ID:	3112.05	
Sample wt/v	ol:	1000	(g/ml) ML		Lab File ID:	BN0666.D	_
Level: (low/	med)	LOW	_		Date Received:	10/28/97	_
% Moisture:		dec	anted: (Y/N)	N	Date Analyzed:	11/05/97	_
Concentrate	d Extract	Volume:	1000 (uL)		Dilution Factor:	1.0	_
Injection Vol	ume: <u>1.</u> (	) (uL)			Soil Aliquot Volu	ıme: <u>1</u>	(uL)
GPC Cleanu	up: (Y/N)	<u> </u>	pH: <u>7</u>				

#### CONCENTRATION UNITS:

Number TICs found:	1	(ug/L or ug/Kg)	UG/L		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 000629-59-4	Tetradecane	28.42	8	JN	

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

Client: US. Army DPW. SELFM-PW-EV Bldg. 173 Ft. Monmouth, NJ 07703		Project # : Location : UST Reg. # :	5841 9090
Analysis :	OQA-QAM-025	Date Received :	08-Nov-00
Matrix :	Soil	Date Extracted :	09-Nov-00
Inst. ID. :	GC TPHC INST. #1	Extraction Method :	Shake
	BTX-5_0 32mm ID_30M	Analysis Complete :	09-Nov-00
Injection Volume :	luL	Analyst :	B.Patel

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
5841.02	B-9090-1	1.00	15.23	94.17	164	ND
5841.03	B-9090-2	1.00	15.66	98.11	153	ND
5841.04	B-9090-3	1.00	15.40	97.36	157	ND
5841.05	B-9090-4	1.00	15.25	98.40	157	ND
METHOD BLANK	TBLK436	1.00	15.00	100.00	157	ND

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ND = Not Detected

MDL = Method Detection Limit

,	1A		FIELD ID	).
,	VOLATILE ORGANICS ANALYS	IS DATA SHEET	Vbl	k121
Lab Name: FMETL	N	JDEP # <u>13461</u>		
Project:	Case No.: 5841	Location: 9090	SDG No.:	
Motrix: (soil/water)	SOIL	Lab Sampl	e ID: Vblk121	
Wathx. (Soll/Water)				
Sample wt/vol:	10.0 (g/ml) G	Lab File ID	· VC004353	<u></u>
Level: (low/med)	MED	Date Recei	ved: <u>11/8/00</u>	
% Moisture: not dec.	0	Date Analy	zed: <u>11/9/00</u>	
GC Column: Rtx50	)2.2 ID: 0.25 (mm)	Dilution Fa	ctor: 1.0	
Soil Extract Volume:		Soil Aliquo	t Volume: 50	(uL)
				、 /
	CONC	CENTRATION UN	IITS:	
	COMPOUND (ug/L)	or ua/Ka) UC	3/KG	Q
CAS NO.		<u> </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
75718	Dichlorodifluoromethane		1000	U
74-87-3	Chloromethane		250	U
75-01-4	Vinvl 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	Ŭ
75-15-0	Carbon Disulfide		250	<u> </u>
75-09-2	Methylene Chloride		500	U
156-60-5	trans-1 2-Dichloroethene		500	U I
75-35-3	1 1-Dichloroethane		250	Ū
109.05-4	Vinvl Acetate		750	
78-03-3	2-Butanone		750	<u> </u>
70-30-0	cis-1 2-Dichloroethene		250	<u> </u>
67-66-3	Chloroform		250	U
75-55-6	1 1 1 T-Trichloroethane		250	U
<u>75-33-5</u>	Carbon Tetrachloride		500	Ŭ
71 42-2	Benzene		250	1
107-06-2	1.2-Dichloroethane		500	U
70.01.6	Trichloroethene		250	<u>U</u>
79-01-0			250	<u> </u>
75-07-3			250	
110-75-8	2-Chloroethyl vinyl ether		500	<u> </u>
10061 01 5	cis-1 3-Dichloropropene		250	<u> </u>
10001-01-0	4-Motbyl-2-Pentanone		500	<u> </u>
100-10-1			250	<del>- ŭ</del>
100-00-0	trans_1.3-Dichloronropen		500	- ŭ
	1 1 2 Triphloroothano	<del>~</del>	500	
			250	
<u>12/-18-4</u>			500	
0-81-180			500	
			250	
108-90-7			200 E00	
100-41-4	Einyidenzene		000	

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1	1A			FIELD I	D.	
	VOLATILE ORGANICS A	NALYSIS DATA SH	HEET			
Lab Name: FMETL	·	NJDEP # <u>13</u>	3461			
Project:	Case No.: 584	Location:	9090 S	DG No.:		
Matrix: (soil/water)	SOIL	Lab S	ample ID:	Vblk121		
Sample wt/vol:	<u>10.0 (g/ml) G</u>	Lab F	ile ID:	VC00435	3.D	
Level: (low/med)	MED .	Date F	Received:	11/8/00		
% Moisture: not dec.	0	Date /	Analyzed:	11/9/00		
GC Column: Rtx50	2.2 ID: 0.25 (mm)	Dilutio	n Factor:	1.0		
Soil Extract Volume:	25000 (uL)	Soil A	liquot Volu	ume: <u>50</u>		(uL
		CONCENTRATIO	N UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/Kg)	<u>UG/</u> KG		Q	
1330-20-7	m+p-Xylenes			750	U	
1330-20-7	o-Xylene			500	U	
100-42-5	Styrene	• 		<u>500</u>	U	
75-25-2	Bromoform			<u> </u>	<u> </u>	
79-34-5	1,1,2,2-Tetrachlore	<u>pethane</u>		500	U.	
<u>541-73-1</u>	1,3-Dichlorobenze	ne		750	<u> </u>	
106-46-7	1,4-Dichlorobenze	ne		750	<u> </u>	
95-50-1	1,2-Dichlorobenze	ne		750	U	1

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	VOLATILE ORGANICS	ANALYSIS DATA SHEET	FIELD ID.	
	TENTATIVELY IDEN	TIFIED COMPOUNDS		
Lab Name: FMET	Ľ	NJDEP # 13461		21
Project:	Case No.: 584	1 Location: 9090.	_ SDG No.:	
Matrix: (soil/water)	SOIL	Lab Sample	ID: Vblk121	
Sample wt/vol:	<u>10.0 (g/ml) G</u>	Lab File ID:	VC004353.D	
Level: (low/med)	MED	Date Receiv	red: <u>11/8/00</u>	
% Moisture: not dec	:. <u>0</u>	Date Analyz	ed: <u>11/9/00</u>	
GC Column: Rtx5	502.2 ID: 0.25 (mm)	Dilution Fac	tor: <u>1.0</u>	
Soil Extract Volume	: <u>25000</u> (uL)	Soil Aliquot	Volume: <u>50</u>	(uL)
			TS:	
Number TICs found	l: <u>    0                                </u>			
CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

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J	1A		FIELD II	Э.
V	OLATILE ORGANICS ANAL	YSIS DATA SHEET	Trip	Blank
Lab Name: <u>FMETL</u>	•	NJDEP # <u>13461</u>		
Project:	Case No.: 5841	Location: 9090	SDG No.:	
Matrix: (soil/water)	SOIL	Lab Sample I	D: 5841.01	
Sample wt/vol:	10.0 (a/ml) G	Lab File ID:	VC00435	9.D
	<u> </u>	- Data Ropoiva	d: 11/9/00	<u></u>
Level: (low/mea)	MED	Dale neceive	u. <u>11/0/00</u>	
% Moisture: not dec.	0	Date Analyze	d: <u>11/9/00</u>	
GC Column: Rtx502	2.2 ID: 0.25 (mm)	Dilution Facto	or: <u>1.0</u>	
Soil Extract Volume:	25000 (uL)	Soil Aliquot V	olume: 50	(uL)
	(==)	•		\
	COI	NCENTRATION UNIT	S:	
CAS NO.	COMPOUND (ug/	/L or ug/Kg) UG/K	G	Q
	· •			1
107028	Acrolein		1800	<u> </u>
107131	Acrylonitrile		1800	
75650	Mothyl tort Putyl othor		3200	
1634044			<u> </u>	
75718	Dichlorodifluoromethan	e	1000	<u> </u>
74-87-3	Chloromethane		250	U
75-01-4	Vinyl Chloride		750	U
74-83-9	Bromomethane		500	<u>    U     </u>
75-00-3	Chloroethane		750	<u> </u>
75-69-4	Trichlorofluoromethane		500	U
75-35-4	1,1-Dichloroethene		250	
67-64-1	Acetone		500	
75-15-0	Mathylona Chlorida		<u>200</u> 520	
156-60-5	trans-1-2-Dichloroether		500	
75-35-3	1.1-Dichloroethane		250	Ŭ
108-05-4	Vinyl Acetate		750	U
78-93-3	2-Butanone		1600	
	cis-1,2-Dichloroethene		250	<u>    U     </u>
<u>67-66-3</u>	Chloroform		250	
75-55-6	1,1,1-Trichloroethane		250	<u> </u>
56-23-5		· -	250	
107.06-2	1 2-Dichloroethane		500	
79-01-6	Trichloroethene		250	<u> </u>
78-87-5	1.2-Dichloropropane		250	Ŭ
75-27-4	Bromodichloromethane		250	U
110-75-8	2-Chloroethyl vinyl ethe	91	500	U
10061-01-5	cis-1,3-Dichloropropene	e	250	Ŭ
108-10-1	4-Methyl-2-Pentanone		500	
108-88-3			250	
10061-02-6	<u>trans-1,3-Dichloroprope</u>	9116 	500	
197-19 A			250	
<u>591-78-6</u>	2-Hexanone	·	500	U
126-48-1	Dibromochloromethane	;	500	Ū
108-90-7	Chlorobenzene		250	U
100-41-4	Ethylbenzene		500	U

1	1A		FIELD I	D.
VC	LATILE ORGANICS A	NALYSIS DATA SHE		Blank
Lab Name: FMETL		NJDEP # <u>1346</u>	<u>61</u>	
Project:	Case No.: 5841	Location: 90	90 SDG No.:	
Matrix: (soil/water)	SOIL	Lab San	nple ID: <u>5841.01</u>	
Sample wt/vol:	10.0 (g/ml) <u>G</u>	Lab File	ID: VC00435	59.D
Level: (low/med)	MED	Date Re	ceived: <u>11/8/00</u>	
% Moisture: not dec.	D	Date An	alyzed: <u>11/9/00</u>	
GC Column: Rtx502.	2 ID: <u>0.25</u> (mm)	Dilution	Factor: 1.0	
Soil Extract Volume: 2	5000 (uL)	Soil Aliq	uot Volume: 50	(uL)
		CONCENTRATION		0
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> </u>
100-42-5	Styrene		500	U
75-25-2	Bromoform		500	
79-34-5	1,1,2,2-Tetrachlor	oethane	500	U
541-73-1	1,3-Dichlorobenze	ne	750	U
106-46-7	1,4-Dichlorobenze	ene	750	
95-50-1	1,2-Dichlorobenze	ene	750	<u> </u>

J	1E					
١	VOLATILE ORGANICS A	NALYSIS DAT	TA SHEET		FIELD ID.	
	TENTATIVELY IDENT	IFIED COMPO	DUNDS			
Lab Name: FMETL		NJDEP :	# <u>13461</u>			пк
Project:	Case No.: 5841	Locati	on: <u>9090</u> .	_ SE	DG No.:	
Matrix: (soil/water)	SOIL	L	ab Sample.	ID:	5841.01	
Sample wt/vol:	10.0 (g/ml) <u>G</u>	L	ab File ID:		VC004359.D	
Level: (low/med)	MED	E	Date Receiv	ed:	11/8/00	
% Moisture: not dec.	0	۵	Date Analyz	ed:	11/9/00	
GC Column: <u>Rtx50</u>	2.2 ID: 0.25 (mm)	Ε	Dilution Fac	tor:	1.0	
Soil Extract Volume:	<u>25000</u> (uL)	ŝ	Soil Aliquot	Volu	me: <u>50</u>	(uL)
Number TICs found:	0	CONCENTR (ug/L or ug/K	ATION UNI g) UG	TS: ⁄KG		
·				1		
CAS NO.	COMPOUND NAME		RT	ES	T. CONC.	Q

J	1A		FIELD II	).
VC	LATILE ORGANICS ANAL	YSIS DATA SHEET	B-9	090-1
Lab Name: FMETL		NJDEP # <u>13461</u>		
Project:	Case No.: 5841	Location: 9090	SDG No.:	
Matrix: (soil/water)		Lab Sample		
	(=/=-)		<u>VO00400</u>	······································
Sample wt/vol:	<u>(g/mi)</u> <u>G</u>	_ Lab File ID:	VC004360	<u>.                                    </u>
Level: (low/med)	MED	Date Recei	ved: <u>11/8/00</u>	
% Moisture: not dec.	5.83	Date Analy:	zed: <u>11/9/00</u>	
GC Column: Rtx502.	2 ID: <u>0.25</u> (mm)	Dilution Fac	otor: <u>1.0</u>	
Soil Extract Volume: 2	5000 , (uL)	Soil Aliquot	Volume: 50	(uL)
	```	·		、 /
	CO	NCENTRATION UN	ITS:	
CAS NO.	COMPOUND (ug	/Lorug/Kg) UG	i/KG	Q
107028	Acrolein	······································	1400	U
107131	Acrylonitrile		1400	
75650	tert-Butyl alcohol		2700	<u> U </u>
1634044	Methyl-tert-Butyl ether		610	<u>U</u>
108203	Di-isopropyl ether		410	<u> </u>
75718	Dichlorodifluoromethan	1e	820	<u>U</u>
74-87-3	Chloromethane		200	
75-01-4	Vinyl Chloride		610	U
74-83-9	Bromomethane		410	
75-00-3	Chloroetnane		610	
75-69-4	I richlorofluoromethane)	410	
75-35-4			200	
75 15 0	Acetone		410	
	Mathylana Chlarida		200	
150 60 5	trans 1 2 Diebloroothor		490	
75-25-2	1 1-Dichloroothane		200	
108-05-4	Vipyl Acetate		610	
78-93-3	2-Butanono		1100	
70-50-0	cis-1 2-Dichloroothene		200	
67-66-3	Chloroform		200	
75-55-6	1 1 1 Trichloroethane		200	
56-23-5	Carbon Tetrachloride		410	<u> </u>
71-43-2	Benzene		200	
107-06-2	1.2-Dichloroethane		410	<u> </u>
79-01-6	Trichloroethene		200	Ŭ
78-87-5	1.2-Dichloropropane		200	
75-27-4	Bromodichloromethane	}	200	 U
110-75-8	2-Chloroethyl vinyl ethe	91	410	U
10061-01-5	cis-1,3-Dichloropropen	e	200	U
108-10-1	4-Methyl-2-Pentanone		410	U
108-88-3	Toluene		200	U
10061-02-6	trans-1,3-Dichloroprope	ene	410	U
79-00-5	1,1,2-Trichloroethane		410	U
1 27-1 8-4	Tetrachloroethene		200	U
591-78-6	2-Hexanone		410	<u> </u>
126-48-1	Dibromochloromethane		410	U
108-90-7	Chlorobenzene		200	U
100-41-4	Ethylbenzene		410	<u> </u>

	J	1A			FIELD II	Э.	
	VOLA	ATILE ORGANICS A	ANALYSIS DATA S	HEET	B-9	090-1	
Lab Name: F	METL		NJDEP # <u>1</u>	3461	_		
Project:		Case No.: 584	Location:	<u>9090</u> S	DG No.: _		.
Matrix: (soil/wa	ter) SO	IL	Lab S	Sample ID:	5841.02		
Sample wt/vol:	13.	0 (g/ml) <u>G</u>	Lab F	ile ID:	VC00436	0.D	
Level: (low/me	ed) ME	D	Date	Received:	11/8/00		
% Moisture: no	ot dec. 5.8	.3	Date	Analyzed:	11/9/00		
GC Column:	Rtx502.2	ID: 0.25 (mm)	Diluti	on Factor:	1.0		
Soil Extract Vo	lume: 250	00 (uL)	Soil A	Aliquot Volu	ıme: <u>50</u>		(uL)
CAS NO.		COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-20)-7	m+p-Xylenes			610	U	
1330-20)-7	o-Xylene			410	U	
100-42-	5	Styrene			410	<u> U</u>	
75-25-2		Bromoform	<u>-</u>		410	<u> </u>	
79-34-5		1,1,2,2-Tetrachlor	oethane		410	<u> </u>	
541-73-	1	1,3-Dichlorobenze	ene		610	<u> </u>	
106-46-	7	1,4-Dichlorobenze	ene		610	<u> </u>	_
95-50-1		1.2-Dichlorobenze	ene		610	<u> </u>	

J	16					
N N	VOLATILE ORGANICS ANALYSIS DATA SHEET					
	TENTATIVELY IDENT	IFIED COMPO	DUNDS		B-0000	_1
Lab Name: FMETL		NJDEP	# <u>13461</u>		D-9090	-1
Project:	Case No.: 584	Locat	ion: <u>9090</u>	_ SD	G No.:	
Matrix: (soil/water)	SOIL	· L	ab Sample	ID: 5	5841.02	
Sample wt/vol:	<u>13.0 (g/ml) G</u>	L	ab File ID:	<u>\</u>	VC004360.D	
Level: (low/med)	MED	C	Date Receiv	/ed: _1	11/8/00	
% Moisture: not dec.	5.83	Γ	Date Analyz	ed: 1	11/9/00	
GC Column: Rtx50	<u>2.2</u> ID: <u>0.25</u> (mm)	E	Dilution Fac	tor: 1	1.0	
Soil Extract Volume:	<u>25000</u> (uL)	5	Soil Aliquot	Volun	ne: <u>50</u>	(uL)
		CONCENTR	ATION UN	TS:		
Number TICs found:	0	(ug/L or ug/K	(g) <u>UG</u>	/KG		
CAS NO.	COMPOUND NAME		RT	EST	T. CONC.	Q

,	1A		FIELD I	D.	
. 1	VOLATILE ORGANICS ANALY	SIS DATA SHEET	B-9	090-2	
Lab Name: FMETL		NJDEP # 13461			
Project:	Case No.: 5841	Location: 9090 S	DG No.:		
Matrix: (soil/water)	SOIL	Lab Sample ID:	5841.03		
Sample wt/vol:	11.7 (a/ml) G	Lab File ID:	VC00436	1.D	
Level: (low/med)	MFD	Date Received	11/8/00	······	
% Meisture: not dog	1 80	Date Analyzed:	11/0/00		
		Date Analyzeu.	11/3/00		
GC Column: <u>Htx50</u>	<u>2.2</u> ID: <u>0.25</u> (mm)	Dilution Factor:	1.0		
Soil Extract Volume:	<u>25000</u> (uL)	Soil Aliquot Volu	ıme: <u>50</u>		(uL)
	CON				
		orwa/Ka) UG/KG		0	
CAS NO.				Q	
107028	Acrolein		1500	U	
107131	Acrylonitrile		1500	U	
75650	tert-Butyl alcohol		2800	U	
1634044	Methyl-tert-Butyl ether		650	<u> </u>	
108203	Di-isopropyl ether		440	<u> </u>	
	Dichlorodifluoromethane)	870	U	
74-87-3	Chloromethane		220	<u> </u>	
<u>75-01-4</u>	Vinyl Chloride		650	<u> </u>	_
74-83-9	Bromomethane		440	<u> </u>	
75-00-3	<u>Chloroethane</u>		650	<u> </u>	
75-69-4	Trichlorofluoromethane		440	<u> </u>	_
75-35-4	1,1-Dichloroethene		220	<u> </u>	
67-64-1	Acetone		440		
75-15-0	Carbon Disulfide		220	<u> </u>	
75-09-2	Methylene Chloride		580		
156-60-5	trans-1,2-Dicnioroetnene	9	440		
			220		
108-05-4			1000		_
78-93-3	2-Bulanone		1200		_
67.66.9	Cls-1,2-Dichloroetiteite		220		
75 55 6			220		_
<u>75-55-6</u>	Carbon Tatrachlarida		440		_
71-49-9	Bonzone		220		—
107-06-2	1.2-Dichloroethane	·····			
79-01-6	Trichloroethene		220		-
78-87-5	1 2-Dichloropronane		220	<u> </u>	
75-27-4	Bromodichloromethane	······	220	<u> </u>	_
110-75-8	2-Chloroethyl vinyl ether		440		
10061-01-5	cis-1.3-Dichloropropene		220	<u> </u>	
108-10-1	4-Methyl-2-Pentanone		440	U	
108-88-3	Toluene		220	Ū	
10061-02-6	trans-1.3-Dichloroproper	ne	440	Ū	_1
79-00-5	_1,1,2-Trichloroethane		440	Ū	
127-18-4	Tetrachloroethene		220	U	
591-78-6	2-Hexanone		440	Ū	
126-48-1	Dibromochloromethane		440	U	
108-90-7	Chlorobenzene		220	U	
100-41-4	Ethylbenzene		440	U	

	1	1A			FIELD II) .	
	VOLATILE ORGANICS ANALYSIS DATA SHEET				B-9090-2		
Lab Name:	FMETL		NJDEP # _13	3461			
Project:		Case No.: <u>5841</u>	Location:	9090 SE)G No.: _		
Matrix: (so	il/water)	SOIL	Lab S	ample ID:	5841.03		
Sample wt	/vol:	<u>11.7 (g/ml) G</u>	Lab F	ile ID:	VC00436	1.D	
Level: (lov	v/med)	MED	Date I	Received:	11/8/00	· ·	
% Moisture	e: not dec.	1.89	Date	Analyzed:	11/9/00		
GC Colum	n: <u>Rtx50</u>	<u>2.2</u> ID: <u>0.25</u> (mm)	Dilutio	on Factor:	1.0		
Soil Extrac	t Volume:	<u>25000</u> (uL)	Soil A	liquot Volur	ne: <u>50</u>		(uL)
				NUNUTS			
						0	
CAS	NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
133	0-20-7	m+p-Xylenes	· ·		650	U	
133	0-20-7	o-Xylene			440	U	
100	-42-5	Styrene			440	<u> </u>	
75-2	25-2	Bromoform			440	<u> </u>	
79-3	34-5	1,1,2,2-Tetrachlor	oethane		440	U	
541	-73-1	1,3-Dichlorobenze	ne		650	U	
106	-46-7	1,4-Dichlorobenze	ne		650	<u> </u>	
95-	50-1	1,2-Dichlorobenze	ene		650	U	

3			1E					
	١	/OLATILE (ORGANICS /	ANALYSIS DA	TA SHEET		FIELD ID.	
		TENTAT	IVELY IDEN	TIFIED COMP	OUNDS		B-9090)-2
Lab Name:	FMETL			NJDEP	# <u>13461</u>			
Project:		Ca	se No.: <u>584</u>	1 Locat	ion: <u>9090</u>	SD	G No.:	
Matrix: (soil/w	vater)	SOIL	_	ι	.ab Sample	ID: <u></u>	5841.03	
Sample wt/vo	ol:	11.7	(g/ml) <u>G</u>	<u> </u>	ab File ID:	۱ -	VC004361.D	
Level: (low/m	ned)	MED	_	l	Date Receiv	/ed:	11/8/00	
% Moisture: r	not dec.	1.89		I	Date Analyz	ed:	11/9/00	
GC Column:	Rtx50	<u>2.2</u> ID: <u>0.</u>	<u>25</u> (mm)	I	Dilution Fac	tor:	1.0	
Soil Extract V	olume:	25000	(uL)	;	Soil Aliquot	Volun	ne: <u>50</u>	(uL)
					ATION UN	ITS: /KG		
Number TICs	s found:	0		(49,20,00,09,1				
CAS NO		COMPO			RT	ES	T. CONC.	Q

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1	1A		FIELD	ID.	
	VOLATILE ORGANICS ANALYSIS DATA	SHEET	B-1	9090-3	
Lab Name: <u>FMEII</u>	NJDEP #	13461	_ L		
Project:	Case No.: 5841 Location	n: <u>9090</u> S	DG No.:		
Matrix: (soil/water)	SOIL La	b Sample ID:	5841.04		
Sample wt/vol:		h Eile ID:			
Sample wivoi.		D File ID.	<u>v000430</u>	<u>2.0</u>	
Level: (low/med)	MED Da	te Received:	11/8/00		
% Moisture: not dec.	<u>2.64</u> Da	te Analyzed:	11/9/00		
GC Column: Rtx50	02.2 ID: 0.25 (mm) Dil	ution Factor:	1.0		
Soil Extract Volume:	25000 (uL) So	il Aliquot Volu	ime: 50		(ul.)
	(,		<u></u>		()
	CONCENTRA	TION UNITS:			
CAS NO	COMPOUND (ug/Lor ug/Kg)	UG/KG		0	
one ne.		00/10		G	
107028	Acrolein		1400	U	
107131	Acrylonitrile		1400	U	
75650	tert-Butyl alcohol		2500	U	
1634044	Methyl-tert-Butyl ether		580	U	
108203	Di-isopropyl ether		390	U	
75718	Dichlorodifluoromethane		780	U	
74-87-3	Chloromethane		190	U	
75-01-4	Vinvl Chloride	·····	580	Ū	
74-83-9	Bromomethane		390	<u> </u>	\neg
75-00-3	Chloroethane		580	<u> </u>	
75-69-4	Trichlorofluoromethane		390		
75-35-4	1.1-Dichloroethene		190		-1
67-64-1	Acetone		390		
75-15-0	Carbon Disulfide		190		
75-09-2	Methylene Chloride		640		-1
156-60-5	trans-1 2-Dichloroethene		390	 II	-
75-35-3	1 1-Dichloroethane		190		-
108-05-4	Vinvl Acetate		580		-1
78-93-3	2-Butanone		1100		-
	cis-1 2-Dichloroethene	·····	100	·	
67-66-3	Chloroform		100		
75-55-6	1 1 1 Trichloroethane		100		-
56-23-5	Carbon Tetrachloride		300		
71-43-2	Banzene		100		-
107-06-2	1 2-Dichloroethano		300		_
70-01-6	Trichloroethene		100		
79.97 5			100		
75-07-4	Bromodichloromothana		100		
110-75 0	2-Chloroothyl vinyl othor		190		\neg
10061 01 5		~ <u> </u>	100		
	4 Mothyl 2 Pentanana		190		
108 89 2			<u></u> 100		\dashv
100-00-3	trans-1 2 Dichleropreseno		190	<u> </u>	
		·	<u>390</u>		{
			390		
12/-18-4			190		_
591-78-6			390		_
126-48-1			390		_
108-90-7			190	<u> U</u>	_
100-41-4	Ethylbenzene		390]

	,	1A			FIELD I	D.	
	VOLATILE ORGANICS ANALYSIS DAT				B-0	000-3	
Lab Name:	FMETL		NJDEP # 1340	61			
Project:		Case No.: 5841	Location: 90	90 SE	G No.:		
Matrix: (soil/	water)	SOIL	Lab San	nple ID:	5841.04		
Sample wt/vo	ol:	<u>13.3 (g/ml) G</u>	Lab File	ID:	VC00436	2.D	
Level: (low/r	ned)	MED	Date Re	ceived:	11/8/00		
% Moisture:	not dec.	2.64	Date An	alyzed:	11/9/00		
GC Column:	Rtx502	2.2 ID: 0.25 (mm)	Dilution	Factor:	1.0		
Soil Extract V	Volume:	25000 (uL)	Soil Aliq	uot Volur	ne: <u>50</u>		(uL)
			CONCENTRATION	UNITS:			
CAS NO	Э.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
1330-	20-7	m+p-Xylenes			580	U	
1330-	20-7	o-Xylene			390	U	
100-4	2-5	Styrene			390	U	
75-25	-2	Bromoform			390	<u> </u>	
79-34	-5	1,1,2,2-Tetrachlord	pethane		390	U	
541-7	3-1	1,3-Dichlorobenze	ne	<u> </u> _	580	<u> </u>	
106-4	6-7	1,4-Dichlorobenze	ne		580	U	
95-50	-1	1,2-Dichlorobenze	ne	<u> </u>	580	U U	

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,	1E					
	VOLATILE ORGANICS	ANALYSIS DA	TA SHEET		FIELD ID.	
	TENTATIVELY IDEN	FIFIED COMPOUNDS			B-9090)-3
Lab Name: FMET	L	NJDEP	# 13461			
Project:	Case No.: 584	1Local	ion: <u>9090</u>	_ SD	G No.:	·····
Matrix: (soil/water)	SOIL	I	_ab Sample	D: <u>s</u>	5841.04	
Sample wt/vol:	<u>13.3 (g/ml) G</u>		_ab File ID:	<u>\</u>	/C004 <u>362.D</u>	
Level: (low/med)	MED	I	Date Receiv	ved: _1	1/8/00	
% Moisture: not dec	. <u>2.64</u>	I	Date Analyz	ed: 1	1/9/00	
GC Column: Rtx5	02.2 ID: 0.25 (mm)	!	Dilution Fac	tor: _	1.0	
Soil Extract Volume	25000 (uL)	;	Soil Aliquot	Volum	ne: <u>50</u>	(uL)
		CONCENTR		ITS:		
Number TICs found	0	(ug/L or ug/k	(g) <u>UG</u> ,	/KG		
CAS NO.	COMPOUND NAME		RT	EST	CONC.	Q

, 1A			FIELD ID.			
V)LATILE ORGANICS ANALYSIS DATA SHE	B-9090-4				
Lab Name: <u>FMETL</u>	NJDEP # _134	61				
Project:	Case No.: 5841 Location: 90	090 SD	G No.:			
Matrix: (soil/water)	SOIL Lab Sar	mple ID+ 1	5841.05			
Sample wt/vol:	10.9 (g/ml) <u>G</u> Lab File	e ID: <u> </u>	/C00436	<u>3.D</u>		
Level: (low/med)	MED Date Re	eceived: 1	1/8/00			
% Moisture: not dec.	1.6 Date Ar	nalyzed:	1/9/00			
GC Column: Rtx502	2 ID: 0.25 (mm) Dilution	Factor: 1	1.0			
Soil Extract Volume: 2	5000 (uL) Soil Alic	uot Volun	ne: 50		(uL)	
	、 ,	•			()	
	CONCENTRATION	UNITS:				
CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG		Q		
	·····					
107028	Acrolein .	<u> </u>	1600	<u> </u>		
107131	Acrylonitrile		<u>1600</u>	<u> </u>		
75650	tert-Butyl alcohol	<u> </u>	<u>3100</u>	<u> </u>		
1634044	Methyl-tert-Butyl ether		710	<u> </u>		
108203	Di-isopropyl ether	<u> </u>	470	<u> </u>		
75718	Dichlorodifluoromethane		<u>940</u>	<u> </u>		
74-87-3	Chloromethane		240	<u> </u>		
75-01-4	Vinyl Chloride	<u> </u>	710	<u> </u>		
74-83-9	Bromomethane		470	ິບ		
75-00-3	Chloroethane		710	U		
75-69-4	Trichlorofluoromethane		470	U		
75-35-4	1,1-Dichloroethene		240	บ		
67-64-1	Acetone		470	U		
75-15-0	Carbon Disulfide		240	U		
75-09-2	Methylene Chloride	,	1000		7	
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		1400			
	cis-1,2-Dichloroethene		240	U		
67-66-3	Chloroform		240	Ū		
75-55-6	1.1.1-Trichloroethane		240	Ū		
56-23-5	Carbon Tetrachloride		470	Ū	1	
71-43-2	Benzene		240	<u> </u>	- I -	
107-06-2	1.2-Dichloroethane		470	<u> </u>	- I .	
79-01-6	Trichloroethene		240	⊢ ŭ		
78-87-5	1.2-Dichloropropane		240			
75-27-4	Bromodichloromethane		240	<u> </u>		
110-75-8	2-Chloroethyl vinyl ether		470		_	
10061-01-5	cis-1 3-Dichloropropene		240		-	
108-10-1	4-Methyl-2-Pentanone		470		-	
108-88-3	Toluene		240	<u> </u>		
10061-02-6	trans-1 3-Dichloropropene		470	11		
70-00-5	1 1 2-Trichloroethane		<u></u> <u></u> <u></u>		\neg	
127,19,4	Tetrachloroethene		240		\neg	
501-78-6			<u></u> +0 <u>/</u> 70		\dashv	
106.48 1	Dibromochloromethano	- <u> </u>	<u>470</u>			
109.00 7	Chlorobenzono		<u>470</u> 240			
			470		-	
100-41-4			470	: U	1	

	, 1A			FIELD ID.			
	١	OLATILE ORGANICS A	LATILE ORGANICS ANALYSIS DATA SHEET NJDEP # <u>13461</u>			090-4	
Lab Nam	e: <u>FMETL</u>						
Project:		Case No.: 584	Location: 9	<u>090</u> SI	DG No.: _		
Matrix: (s	oil/water)	SOIL	Lab Sa	mple ID:	5841.05		
Sample v	ample wt/vol: <u>10.9</u>		Lab File ID: V		VC004363.D		
Level: (lo	evel: (low/med) MED		Date R	Received: <u>11/8/00</u>			
% Moistu	Moisture: not dec. 1.6 Date Analyzed			nalyzed:	11/9/00		
GC Column: Rtx502.2 ID: 0.25 (mm) Dilution Factor:			1.0	1.0			
Soil Extract Volume: 25000 (uL) Soil Aliquot			quot Volu	me: <u>50</u>		(uL)	
CAS	S NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q	
13	30-20-7	m+p-Xvlenes			710	U	
13	30-20-7	o-Xylene			470	U	
10	0-42-5	Styrene			470	U	
75	-25-2	Bromoform			470	Ų	
79	-34-5	1,1,2,2-Tetrachlor	1,1,2,2-Tetrachloroethane			U	
54	1-73-1	1,3-Dichlorobenze	1,3-Dichlorobenzene			U	_
10	6-46-7	1,4-Dichlorobenze	ene		710		_
95	95-50-1 1,2-Dichlorobenzene				710	<u> </u>	

			1E					
VOLATILE ORGANICS ANALYSIS DATA SHEET					FIELD ID.			
		TENTATIVELY IDENTIFIED COMPOUNDS			B-9090)-4		
Lab Name:	FMETL			NJDEP	# <u>13461</u>			
Project:		Ca	se No.: <u>5841</u>	Locat	ion: <u>9090</u> .	_ SD	G No.:	
Matrix: (soil/w	water)	SOIL	_	L	ab Sample	ID:	5841.05	
Sample wt/vo	ol:	10.9	(g/ml) G	1	ab File ID:	-	VC004363.D	
Level: (low/r	ned)	MED		Ĩ	Date Receiv	ved:	11/8/00	
% Moisture:	not dec.	1.6		I	Date Analyz	ed:	11/9/00	
GC Column:	Rtx50	<u>2.2</u> ID: <u>0</u> .	25 (mm)	I	Dilution Fac	tor:	1.0	
Soil Extract \	/olume:	25000	(uL)	5	Soil Aliquot	Volur	ne: <u>50</u>	(uL)
				CONCENTR	ATION UNI	TS:		
Number TICs	s found:	0		(ug/L or ug/K	.g) <u>UG</u> /	/KG		
CAS NO.		COMPO	JND NAME		RT	ES	T. CONC.	Q