DEPARTMENT OF THE ARMY



OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT U.S. ARMY FORT MONMOUTH P.O. 148 OCEANPORT. NEW JERSEY 07757

April 14, 2015

Ms. Linda Range New Jersey Department of Environmental Protection Case Manager Bureau of Southern Field Operations 401 East State Street, 5th Floor PO Box 407 Trenton, NJ 08625

Re: Underground Storage Tanks within Parcel 68

Fort Monmouth, NJ

Attachments:

- A. Summary Table of Parcel 68 Underground Storage Tanks
- B. Site Layout Drawings of Parcel 68 (2 drawings)
- C. No Further Action Letters from NJDEP
- D. UST 906A Report
- E. UST 910 File Review and Analyses

Dear Ms. Range:

The U.S. Army Fort Monmouth (FTMM) has reviewed existing file information for underground storage tank (UST) sites at Fort Monmouth within Environmental Condition of Property (ECP) Parcel 68. The purpose of this submittal is to provide comprehensive documentation of the location and closure status of all USTs identified within this parcel, which we believe will be useful for the future Phase II property transfer.

A summary table of USTs identified within Parcel 68 is provided as Attachment A, and the locations of these USTs within Parcel 68 are presented in Attachment B. All of the USTs identified within Parcel 68 have been removed.

Multiple USTs within Parcel 68 have been identified that were previously approved for No Further Action (NFA) by NJDEP; documentation of this approval is provided in Attachment C, and referenced below for specific USTs. In these cases, there is generally a supporting investigation report that was previously submitted to NJDEP that describes the basis for closure. For the sake of brevity, we have not included these reports for USTs where an NFA has already been approved. However, these reports are available within the FTMM environmental records.

In the Attachment A table, the term "Case Closed" has been used (consistent with previous FTMM procedures) to indicate the Army determined that no further sampling or remedial actions were warranted for a specific UST site. All Parcel 68 USTs were designated as "Case Closed." "Case Open" would indicate that the Army determined that ongoing monitoring, reporting or possibly even remedial action was warranted. In contrast, "No Further Action" has been reserved for NJDEP approval that no further sampling or remedial actions are warranted.

Parcel 68 generally includes the 900 Area of Fort Monmouth. It is an irregularly shaped area centered near the intersection of Murphy Drive and Courier Avenue of the Main Post. It was designated in the ECP Report as the 900 Building Area Former USTs. Several UST sites (901, 916, 917 and 918) were located outside of the Parcel 68 boundary as designated by the ECP Report, but have been included in this submittal based on proximity and similar site histories.

We are submitting the following documentation for the multiple USTs that were previously removed from Parcel 68, and we request a No Further Action determination for each site (sites that have been previously approved by NJDEP are highlighted in green):

- UST 901 NFA was approved by NJDEP on 8/29/2000 (Attachment C).
- UST 902 NFA was approved by NJDEP on 7/10/1998 (Attachment C).
- UST 905 NFA was approved by NJDEP on 1/10/2003 (Attachment C).
- UST 906A investigation report is presented in Attachment D.
- UST 906B NFA was approved by NJDEP on 8/29/2000 (Attachment C).
- UST 907 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 909 NFA was approved by NJDEP on 10/23/2000 (Attachment C).
- UST 910 File Review summary and analyses is presented in Attachment E.
- UST 911 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 912 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 913 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 914 NFA was approved by NJDEP on 10/23/2000 (Attachment C).
- UST 915 NFA was approved by NJDEP on 10/23/2000 (Attachment C).
- UST 916 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 917 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 918 NFA was approved by NJDEP on 2/24/2000 (Attachment C).
- UST 977 NFA was approved by NJDEP on 10/23/2000 (Attachment C).
- UST 979 NFA was approved by NJDEP on 10/23/2000 (Attachment C).

This information supports the conclusion that all UST soil contamination issues identified within Parcel 68 have been adequately addressed by previous environmental activities. One unresolved groundwater issue has been identified:

 Groundwater at UST 906A exceeds the NJDEP Ground Water Quality Criteria for 2methylnaphthalene.

In summary, we submit that the Army has provided adequate due diligence with regards to the environmental condition of this Parcel, and we request that NJDEP approve No Further Action. Should you have any questions or require additional information, please contact me at (732) 380-7064 or by email at wanda.s.green2.civ@mail.mil.

Sincerely,

Wanda Green

BRAC Environmental Coordinator

ce: Delight Balducci, HQDA ACSIM Joseph Pearson, Calibre

Joseph Pearson, Calibre James Moore, USACE Cris Grill, Parsons

ATTACHMENT A

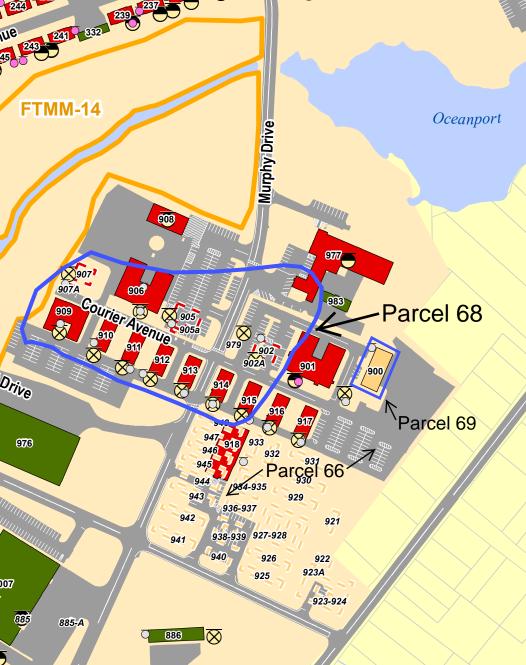
Summary Table of Parcel 68 Underground Storage Tanks

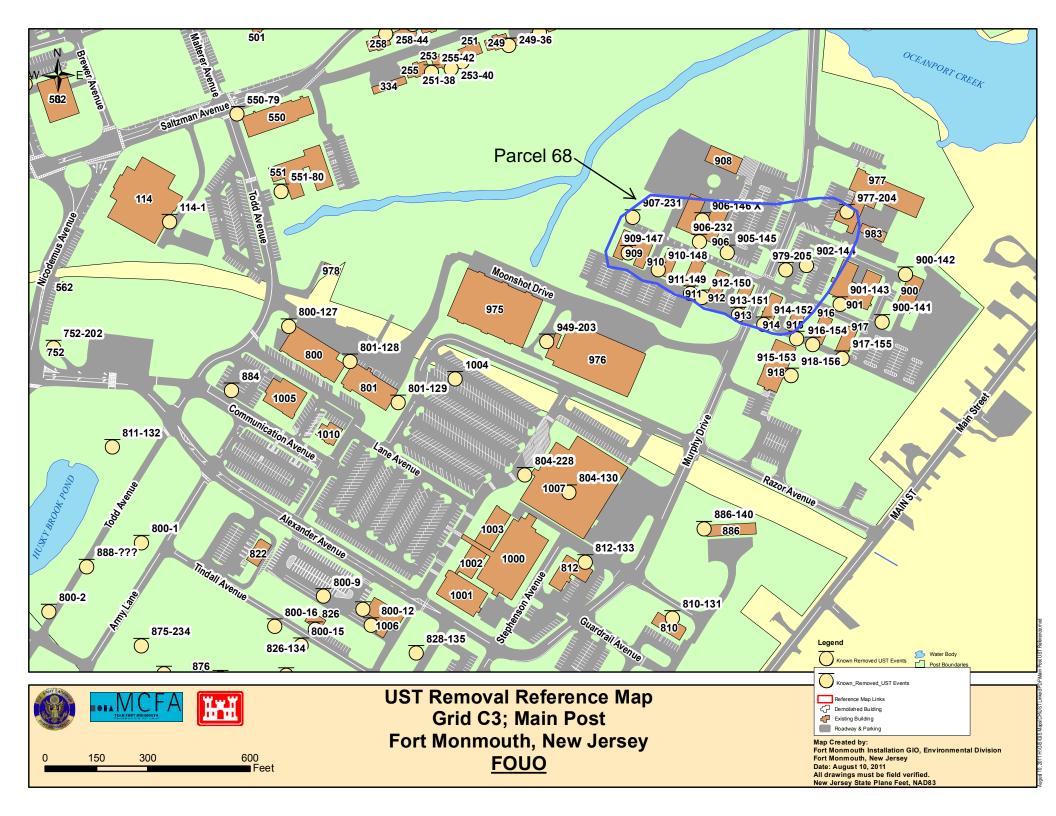
Summary Table of Parcel 68 USTs

Site Name	RESIDENT IAL	Registration ID	DICAR	Tank Size and Type	Product	CaseStatus	In Parcel 68?	File Review Comments
901	NO	81533-143		2000 gal. fiberglass	#2 FUEL OIL	Case Closed	Nearby	NJDEP closure letter 8/29/2000
902	NO	81533-144		1000 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 7/10/1998
905	NO	81533-145	97-06-24-1325-26	1000 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 1/10/2003
906A	NO	81533-146		1000 gal. steel	#2 FUEL OIL	Case Closed	Yes	Submit 2006 TVS Report and request NFA
906B	NO	81533-232		550 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 8/29/2000
907	NO	81533-231		1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 2/24/2000
909	NO	81533-147	98-03-10-1634-02	1000 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 10/23/2000
910	NO	81533-148		1000 gal. steel	#2 FUEL OIL	Case Closed	Yes	Submit 2006 Geoprobe results and request NFA
911	NO	81533-149	98-01-02-1141-57	1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 2/24/2000
912	NO	81533-150	97-12-29-1342-37	1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 2/24/2000
913	NO	81533-151	97-12-10-1510-14	1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 2/24/2000
914	NO	81533-152	98-03-18-902-12	1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 10/23/2000
915	NO	81533-153		1080 gal. steel	#2 FUEL OIL	Case Closed	Yes	NJDEP closure letter 10/23/2000
916	NO	81533-154		1080 gal. steel	#2 FUEL OIL	Case Closed	Nearby	NJDEP closure letter 2/24/2000
917	NO	81533-155		1080 gal. steel	#2 FUEL OIL	Case Closed	Nearby	NJDEP closure letter 2/24/2000
918	NO	81533-156		1500 gal. steel	#2 FUEL OIL	Case Closed	Nearby	NJDEP closure letter 2/24/2000
977	NO	81533-204		500 gal. fiberglass	DIESEL	Case Closed	Yes	NJDEP closure letter 10/23/2000
979	NO	81533-205	98-06-12-1329-17	275 gal. steel	DIESEL	Case Closed	Yes	NJDEP closure letter 10/23/2000

ATTACHMENT B

Site Layout Drawings of Parcel 68





ATTACHMENT C

No Further Action Letters from NJDEP



State of New Jersey

Christine Todd Whitman Governor

Department of Environmental Protection

Robert C. Shinn, Jr. Commissioner

Mr. James Ott Director – Public Works U.S. Army, Fort Monmouth Fort Monmouth, NJ 07703

JUL 1 0 1998

Re:

UST Closure Reports
Fort Monmouth Army Base
Tinton Falls, Monmouth County

Dear Mr. Ott:

The NJDEP is in receipt of UST closure reports noted below. These documents have been reviewed by the NJDEP throughout the closure process and the documents submitted were discussed throughout their drafting and in great detail upon submittal. Based on these steps and the final review conducted by me, the NJDEP accepts the closure reports and all of the NFA requests commensurate with these submittals.

NJDEP REG.				-	DEP
NO.	BUILDING	CONTENTS	CAPACITY	PROPOSAL	<u>APPROVAL</u>
= 90010-10	116C-MP/E	No. 2 Fuel Oil	2000	NFA	YES
81533-134	826-MP/W	No. 2 Fuel Oil	550	NFA	YES
81533-144	902-MP/W	No. 2 Feel Orl	1000	NFA	YES
81515-20	2529-CW	No. 2 Fuel	1000	NFA	YES
81515-22	2532-CW	No. 2 Fact Oil	550	NFA	YES
81515-23	2533-CW	No. 2 Fuel Oil	1000	NFA	YES
81515-31	2561-CW	No. 2 Fuel Oil	550	NFA	YES
90010-27	410-MP/E	No. 2 Fuel Oil	1080	NFA	YES
81533-206	1075	NOT	SUBMITTED	WITH	PACKAGE
81515-16	2504B-CW	No. 2 Fuel Oil	1000	NFA	YES
RI515-18	2507-CW	No. 2 Fuel Oil	1080	NFA	YES
81515-26	2536-CW	No. 2 Fuel Oil	1000	NFA	YES
81515-14	2503-CW	No. 2 Fuel Oil	1000	NFA	YES
90010-12	117B-MP/E	No. 2 Fuel Oil	2000	MFA	YES
90010-34	418-MP/E	No. 2 Fuel Oil	1080	NFA	YES
90010-36	420-MP/E	No. 2 Fuel Oil	1080	NFA	YES
90010-38	422-MP/E	No. 2 Fuel Oil	1080	NFA	YES
9(4)10-41	427-MP/E	No.2 Fuel Oil	1080	NFA	YES
90010-44	430A-MP/E	No. 2 Fuel Oil	550	NFA	YES
90010-50	453-MP/E *	No. 2 Fuel Oil	1080	NFA	YES
90010-51	454-MP/E	No. 2 Fuel Oil	1080	NFA	YES
81533-76	501-MP/W	No. 2 Fuel Oil	1000	NFA	YES
81533-141	900A-MP/W	No. 2 Fuel Oil	1000	NFA	YES
81515-17	2506-CW	No. 2 Fuel Oil	1000	NFA.	YES
90010-8	116A-MP/E	No. 2 Feel Oil	1000	NFA	YES
90010-11	117A-MP/E	No. 2 Fuel Oil	2000	NFA	YES
90010-53	480-MP/E	No. 2 Fuel Oil	1000	NFA	YES

#151/G19 2508-CW No 2 End Oil 550 NFA YES
STETETTO TO THE PART OF THE STEEL
OTETETET CHIRLIADAN MACTEMENTE HITE NEA YES

The efforts made to assure protection of human health and the environment as well as the efforts made to make the entire closure process efficient and consistent with the NJDEP's Technical Requirements for Site Remediation (N.J.A.C. 7:9-6 et seq.) has been exceptional.

If I can be of any assistance, please do not hesitate to contact me should you have any questions or comments.

Sincerely,

Ian R. Curtis, Case Manager Bureau of Federal Case Management ICURTIS@DEP.STATE.NJ.US

cc. Kevin Kratina, BUST

FTMMTH51.DOC



State of New Jersey

Christine Todd Whitman Governor

Department of Environmental Protection

Robert C. Shinn, Jr.

Commissioner

Mr. James Ott C/O: Dinker Desai Director – Public Works U.S. Army, Fort Monmouth Fort Monmouth, NJ 07703

FEB 2 4 2000

Re:

UST Closure Reports - Closure Approvals

Fort Monmouth Army Base

Fort Monmouth, Monmouth County

Dear Mr. Ott:

The NJDEP has reviewed the UST Closure and Site Investigation Reports for the Fort Monmouth underground storage tank sites noted below. Based on the NJDEP review of these documents, your request that the NJDEP approve the closure reports for those tanks listed below.

The following tanks were removed, sampled and analyzed in accordance with State and Federal requirements. Additionally, the reports consistently state the Fort Monmouth Public Works Department policy of removing all soils which are determined to have total petroleum hydrocarbon contamination (TPHC) greater than 1000 ppm. NJDEP criteria requires similar removal for TPHC contamination greater than 10,000 ppm. These activities are conservative and therefore further assure the NJDEP that no further action is necessary at these sites.

NJDEP Reg. #	Bldg. #	NJDEP Reg. #	Bldg. #
0081533-59	283B	*0081533-135	828
0090010-46	430C	0081533-136	864A
0081533-111	695	0081533-137	866
0081533-117	739	*0081533-231	907
0081533-118	744	0081533-154	916
0081533-121	747	0081533-156	918
0081533-124	787	0081533-170	1110
0081533-125	788	0081533-172	1123
0081533-128	801A	0081533-207	1150
0081533-133	812		

^{*} No product lines were found during the excavation of the UST due to the fact the buildings were removed prior to the USTs. Based on a review of available maps and drawings, the product lines were less than 15 feet in length at each of the locations. Thus, no additional sampling was required.

If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

Ian R. Curtis, Case Manager Bureau of Case Management ICURTIS@DEP.STATE.NJ.US

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State of New Hersey

Christine Todd Whitman

Department of Environmental Protection

Robert C. Shinn, Jr. Commissioner

Governor Mr. James Ott

C/O: Dinker Desai Director - Public Works U.S. Army, Fort Monmouth Fort Monmouth, NJ 07703

FEB 2 4 2000

Re:

UST Closure Reports - Closure Approvals

Fort Monmouth Army Base

Fort Monmouth, Monmouth County

Dear Mr. Ott:

The NJDEP has reviewed the UST Closure and Site Investigation Reports for the Fort Monmouth underground storage tank sites noted below. Based on the NJDEP review of these documents, your request that the NJDEP approve the closure reports for those tanks listed below.

The following tanks were removed, sampled and analyzed in accordance with State and Federal requirements. Additionally, the reports consistently state the Fort Monmouth Public Works Department policy of removing all soils which are determined to have total petroleum hydrocarbon contamination (TPHC) greater than 1000 ppm. NJDEP criteria requires similar removal for TPHC contamination greater than 10,000 ppm. These activities are conservative and therefore further assure the NJDEP that no further action is necessary at these sites.

NJDEP Req. #	Bldg. #	NJDEP Req. #	Bldg. #
0090016-16	165	0081533-151	913
0090010-69	170D	0081533-155	917
0090010-20	197	0081533-165	1105
0081533-54	270	0081533—169	1109
0081533-60	286	0081533-173	1213A
0081533-65	291	0081533-208	1221
0090010-70	400	00192486-34	2018
0081533-103	671A	00192486-35	2021A
0081533-138	876A	0081515-30	2543
0081533-149	911	0081515-40	2707
0081533-150	912		•

If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

Ian R. Curtis, Case Manager Bureau of Case Management ICURTIS@DEP.STATE.NJ.US

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State of New Jersey

Christine Todd Whitman Governor

Department of Environmental Protection

Robert C. Shinn, Jr. Commissioner

AUG 2 9 200U

Mr. Dinkerrai Desai
Department of the Army
Headquarters, U.S. Army Communications-Electronic Command
Fort Monmouth, NJ 07703-5000

Re:

UST Closure Approval/NFA Fort Monmouth Main Post Monmouth County

Dear Mr. Desai:

The NJDEP is in receipt of nine (9) UST closure reports dated July 27, 1998. The Army has requested to receive No Further Action approval letters for each of these reports. This letter approves the NFA requests for the following 9 UST located on the Main Post of the Fort Monmouth site:

	NJDEP Req. #	Bldg. #
	0090010-35	419
	0090010-48	439
	0090010-56	484
	0081533-77	502
ı	0081533-143	901
ľ	0081515-12	2275
	0081515-13	2502
	0081515-25	2535
	0081515-27	2537

The NJDEP has determined that the Army has performed the remedial actions in a manner consistent or in excess of the regulatory requirements, specifically the Technical Requirements For Site Remediation (N.J.A.C. 7:26E et seq.). Soils with contamination in excess of the NJDEP residential cleanup criteria have been excavated and the Army has taken great care to provide documentation which assures us that all sources of contamination have been remediated.

If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

lah R. Curtis, Case Manager Bureau of Case Management ICURTIS@DEP.STATE.NJ.US

FTMMTH069IRC.DOC



State of New Jersey

Christine Todd Whitman Governor

Department of Environmental Protection

Robert C. Shinn, Jr.

Commissioner

Mr. Dinkerrai Desai Department of the Army Headquarters, U.S. Army Communications-Electronic Command Fort Monmouth, NJ 07703-5000

Re:

UST Closure Approval/NFA Fort Monmouth Main Post

Monmouth County

OCT 2 3 2000

Dear Mr. Desai:

The NJDEP is in receipt of forty UST closure reports dated September 11, 2000. The Army has requested to receive No Further Action approval letters for each of these reports. This letter approves the NFA requests for the following 40 UST located on the Main Post of the Fort Monmouth site:

NJDEP Req. #	Bldg. #	NJDEP Req. #	Bldg. #	NJDEP Req. #	Bldg. #
009001004	64B	0081533—79	550	0081533—179	1220F
009001009	116B	0081533—116	718	0081533—180	1220E
009001009	206B	0081533—202	752	0081533—181	1220D
0081533—56	275	0081533—147	909	0081533—182	1220C
0090010-23	276	0081533—152	914	0081533—183	1220B
0090010-25	280	0081533—153	915	00192486—36	2043
0081533—201	286/548A	0081533—204	977	0081515—15	2504A
0081533—62	288	0081533—205	979	0081515—35	2700
0081533—63	289	0081533—167	1107	0081515—36	2700
0081533—66	292	0081533—233	1107B	0081515—37	2700
0090010-43	429	0081533—1 <i>7</i> 5	1220J	0081515—38	2700
0090010-52	475	0081533—1 <i>7</i> 6	12201	008151539	2700
0090010-55	483	0081533—1 <i>77</i>	1220H		
0081533—75	500	0081533—178	1220G		<u> </u>

The NJDEP has determined that the Army has performed the remedial actions in a manner consistent with the regulatory requirements, specifically the Technical Requirements For Site Remediation (N.J.A.C. 7:26E et seq.). Soils with contamination in excess of the NJDEP residential cleanup criteria have been excavated and the Army has taken great care to provide documentation that assures us that all sources of contamination have been remediated.

If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

Yan R. Curtis, Case Manager Bureau of Case Management JCURTIS@DEP.STATE.NJ.US

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James E. McGreevey
Governor

Department of Environmental Protection

Bradley M. Campbell Commissioner

Mr. Dinkertai Desai Department of the Army Headquarters, U.S. Army Communications-Electronic Command Fort Monmouth, NJ 07703-5000

Re:

UST Closure Approval/NFA Fort Monmouth Main Post Monmouth County JAN 1 0 2003

Dear Mr. Desai:

The NJDEP is in receipt of sixty-eight (68) underground storage tank (UST) closure reports dated between July 17, 2001 and May 15, 2002. The Army has requested to receive No Further Action (NFA) approval letters for each of these reports. This letter approves the NFA requests for the following 68 UST that are located on the Main Post of the Fort Monmouth site:

Submittal Date	Building No.	NJDEP Reg. #	Residential
07/17/2001	104	90010-75	NO
07/17/2001	699A	81533-112	NO
07/17/2001	800A	81533-127	NO
07/17/2001	875	81533-234	NO
07/17/2001	949	81533-203	NO
07/17/2001	1220A	81533-184	NO
07/17/2001	2000B	192486-38	NO
01/02/2002	257	81533-200	NO
01/02/2002	283C	81533-229	NO
01/02/2002	290B	81533-224	NO
01/02/2002	290B	81533-225	NO
01/02/2002	491	90010-71	NO
01/02/2002	605	81533-85	NO
01/02/2002	678	81533-105	NO
01/02/2002	699	81533-236	NO
01/02/2002	699	81533-238	NO
01/02/2002	699	81533-237	NO
01/02/2002	699	81533-235	NO
01/02/2002	801B	81533-129	NO
01/02/2002	804A	81533-130	NO
01/02/2002	2337	81515-65	NO
01/02/2002	2562A	81515-41	NO
01/02/2002	2707	81515-50	NO
01/02/2002	2707	81515-49	NO
01/02/2002	2707	81515-51	NO
01/02/2002	2707	81515-47	NO
01/02/2002	2707	81515-48	NO

Submittal Date	Building No.	NJDEP Reg. #	Residential
02/13/2002	2044	192486-24	NO
02/13/2002	2044	192486-32	NO
02/13/2002	2044	192486-33	NO
02/26/2002	208B	81533-210	YES
03/05/2002	246	N/A	YES
03/05/2002	261B	N/A	YES
05/15/2002	106	90010-74	NO
05/15/2002	164	90010-15	NO
05/15/2002	173	90010-19	NO
05/15/2002	200	81533-2	NO
05/15/2002	208A	81533-6	YES
05/15/2002	233	81533-21	YES
05/15/2002	237	81533-25	YES
05/15/2002	271	81533-55	YES
05/15/2002	277	90010-24	NO
05/15/2002	296B	81533-217	NO
05/15/2002	296B	81533-223	NO
05/15/2002	296B	81533-221	NO
05/15/2002	296B	81533-220	NO
05/15/2002	296B	81533-222	NO
05/15/2002	296B	81533-218	NO
05/15/2002	296B	81533-216	NO
05/15/2002	296B	81533-215	NO
05/15/2002	296B	81533-214	NO
05/15/2002	296B	81533-213	NO
05/15/2002	296B	81533-219	NO
05/15/2002	426	90010-40	NO
05/15/2002	482	90010-54	NO
05/15/2002	600 A	81533-83	NO
05/15/2002	600 B	81533-212	NO
05/15/2002	611	81533-87	NO
05/15/2002	615	81533-89	NO
05/15/2002	618	81533-91	NO
05/15/2002	619	81533-92	NO
05/15/2002	621	81533-94	NO
05/15/2002	634	N/A	NO
05/15/2002	638	N/A	NO
05/15/2002	639-2	N/A	NO
05/15/2002	640	N/A	NO
05/15/2002	641	N/A	NO
05/15/2002	644	N/A	NO
05/15/2002	664	. N/A	NO
05/15/2002	666	N/A	NO
05/15/2002	686	81533-107	NO
05/15/2002	697	81533-194	NO
05/15/2002	697	81533-195	NO

:

7

Submittal Date	Building No.	NJDEP Reg. #	Residential
05/15/2002	697	81533-196	NO
05/15/2002	876B	81533-139	NO
05/15/2002	886	81533-140	NO
05/15/2002	905	81533-145	NO
05/15/2002	1102	81533-162	NO
05/15/2002	1104	81533-164	NO
05/15/2002	2067	192486-37	NO
05/15/2002	2534	81515-24	NO
05/15/2002	2603	81515-60	NO
05/15/2002	2700 2,6	81515-61	NO

The NJDEP has determined that the Army has performed the remedial actions in a manner consistent with the regulatory requirements, specifically the Technical Requirements For Site Remediation (N.J.A.C. 7:26E et seq.). Soils with contamination in excess of the NJDEP residential cleanup criteria have been excavated and the Army has taken great care to provide documentation that assures us that all sources of contamination have been remediated.

If you should have any questions or comments, please do not hesitate to contact me at (609) 633-7232 or via E-mail.

Sincerely,

Ian R. Curtis, Case Manager Bureau of Case Management ICURTIS@DEP.STATE.NJ.US

FTMMTH116IRC.DOC

ATTACHMENT D

UST 906A Report

U.S. Army Garrison Fort Monmouth, New Jersey

Underground Storage Tank Closure Report

Main Post – Building 906A Courier Ave.

NJDEP UST Registration No. 81533-146

February 2008

UNDERGROUND STORAGE TANK REPORT

MAIN POST -BUILDING 906A NJDEP UST REGISTRATION NO. 81533-146

FEBRUARY 2008

PREPARED FOR:

U.S. ARMY GARRISON, FORT MONMOUTH, NJ DIRECTORATE OF PUBLIC WORKS BUILDING 167 FORT MONMOUTH, NJ 07703

PROJECT NO. 06-34950

PREPARED BY:

TECOM-VINNELL SERVICES, INC. P.O. BOX 60 FT. MONMOUTH, NJ 07703

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Appendix B Soil and Groundwater Analytical Data Package

EXECUTIVE SUMMARY

UST Closure

A single wall steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) guidelines on June 26, 1990. The UST was located on the southwest side of Building 906A in the Main Post area of Fort Monmouth. UST No. 81533-146 was a 1,000-gallon tank containing No. 2 heating oil.

Site Assessment

This site assessment was performed by TECOM-Vinnell Service (TVS) personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*.

During the time of UST removal, no closure soil samples were collected. Soil sampling was not required at the time. However, in order to confirm that the tank did not leak, this subsurface investigation was conducted. On January 4, 2006, a Geoprobe was utilized to collect soil samples 906AC, 906AE, 906AW and 906AC (groundwater) from a total of three (3) locations along the tank centerline bottom. All soil samples were analyzed for total petroleum hydrocarbons (TPH). Groundwater was encountered at approximately four (4.0) feet below surface grade in the borings. A sample of it was collected and analyzed for volatile organic analysis (VOA) and semi-volatile organic analysis (SVOA).

Findings

The closure soil samples collected from the location associated with UST No. 81533-146, contained TPH concentrations below the NJDEP health based criterion of 10,000 milligrams per kilogram (mg/kg) for total organic contaminants (N.J.A.C. 7:26E and revisions dated February 3, 1994). Soil samples 906AC, 906AE and 906AW contained TPH concentrations of 5634 mg/kg, 6699 mg/kg and 195 mg/kg, respectively. Contingent VOA analysis was conducted on soil samples 906AC and 906AE in which there were no compounds detected above the NJDEP Residential Direct Contact Soil Cleanup Criteria.

Conclusions and Recommendations

Based on the closure soil sampling results, soils with TPH concentrations exceeding the NJDEP health based criterion of 10,000 mg/kg for total organic contaminants are not present in the location of the UST. A groundwater sample, analyzed for volatile organic analysis and semi-volatile organic analysis, did contain several compounds above the analytical method detection limits. However, all detected compounds were below the NJDEP Class II Groundwater Quality Criteria.

No Further Action is proposed in regard to the closure and site assessment of UST No. 81533-146 at Building 906A.

1.0 UNDERGROUND STORAGE TANK CLOSURE SOIL SAMPLING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-146, was closed at Building 906A located on the Main Post at the U.S. Army Garrison, Fort Monmouth, New Jersey. Refer to site location map on Figure 1. This report presents the results of soil and groundwater sampling analysis to confirm that the tank did not leak. The UST was a 1,000-gallon, single-wall steel tank containing No. 2 heating oil. The UST was installed in 1954 and the removal was done on June 26, 1990. Archived documents including Removal Procedures, Site Assessment Compliance Statement, NJDEP Standard Reporting Form along with the NJDEP UST Site Investigation Report Form are included in Appendix A.

This UST Closure Report has been prepared by TVS to assist the U.S. Army Garrison DPW in complying with the NJDEP - Underground Storage Tanks regulations. The applicable NJDEP regulations at the date of closure were the *Closure of Underground Storage Tank Systems* (N.J.A.C. 7:14B-9 et seq. December, 1987 and revisions dated April 20, 2003).

This report was prepared using information required by the *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) (*Technical Requirements*). Section 1 of this UST Closure Report provides a summary of the UST site. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in Section 3 of this report.

1.2 SITE DESCRIPTION

Building 906A, Courier Ave., is located in the central portion (900 Area) of the Main Post of Fort Monmouth, as shown on Figure 1. A historical map, Figure 2, was used to determine the location of the UST at Building 906A. UST No. 81533-146 was located on the southwest side of Building 906A.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the 900 Area. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

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

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

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

Local Geology

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

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

Hydrogeology

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

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

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

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

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

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

Building 906A is located approximately 400 feet south of Husky Brook, the nearest water body, which flows into Oceanport Creek and then into the Shrewsbury River. Based on the Main Post topography, the groundwater flow in the area of Building 906A is anticipated to be to the north.

1.3 HEALTH AND SAFETY

Work site health and safety hazards were minimized during all site investigation activities. All areas which posed a vapor hazard were monitored by a qualified individual utilizing a calibrated photo-ionizer detector: Thermo Instruments Organic Vapor Monitor (OVM) — Model #580-B. The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA. All work areas were properly vented to insure that there were no contaminants present in the breathing zone above permissible exposure limits (PEL's).

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All analyses were performed and reported by Fort Monmouth Environmental Testing Laboratory, a NJDEP-certified testing laboratory. All sampling was performed by a NJDEP Certified Subsurface Evaluator according to the methods described in the NJDEP Field Sampling Procedures Manual (1992). Sampling frequency and parameters analyzed complied with the NJDEP document *Technical Requirements for Site Remediation*, 7:26E-3.9 (December 17, 2002 and revisions dated February 3, 2003) which was the applicable regulation at the date of the investigation. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Assessment Activities.

• Ft. Monmouth Directorate of Public Works-Environmental Division

Contact Person: Joseph Fallon Phone Number: (732) 532-6223

Subsurface Evaluator: Frank Accorsi

Employer: TECOM-Vinnell Services, Inc. (TVS)

Phone Number: (732) 532-5241 NJDEP License No.: 0010042

TVS - NJDEP License No.: US252302

Analytical Laboratory: Fort Monmouth Environmental Testing Laboratory

Contact Person: Jacqueline Hamer Phone Number: (732) 532-4359

NJDEP Laboratory Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

Field screening of the soils was performed by a NJDEP certified Subsurface Evaluator using an OVM and visual observations to identify potentially contaminated material of which none were found.

2.3 SOIL SAMPLING

On January 4, 2006, closure soil samples 906AC (shallow), 906AC (deep), 906AE and 906AW were collected from a total of three (3) locations along the tank centerline bottom of the UST. Groundwater was encountered at approximately four (4.0) feet below surface grade in the borings. All soil samples were analyzed for TPH. A soil sample location map is provided on Figure 3.

The site assessment was performed by TVS personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* and the NJDEP *Field Sampling Procedures Manual*. A summary of sampling activities including parameters analyzed is provided on Table 1. The soil samples were collected into laboratory prepared glassware using properly decontaminated stainless steel trowels. After collection, the samples were immediately placed on ice in a cooler and delivered to Fort Monmouth Environmental Testing Laboratory for analysis.

2.4 GROUNDWATER SAMPLING

On January 4, 2006, groundwater sample 906AC-GW was collected from soil borehole 906AC to assess the groundwater quality in the location of the tank. A temporary PVC piezometer was installed in the borehole for sample collection. The sample was collected into laboratory prepared glassware using a disposable teflon bailer. The sample was analyzed for volatile organic analysis (VOA) and semi-volatile organic analysis (SVOA).

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

Closure soil samples were collected from a total of three locations on January 4, 2006 to evaluate soil conditions in the location of the UST. All samples were analyzed for TPH. The closure soil sample results were compared to the NJDEP health based 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 criteria is provided on Table 2. The analytical data package, including associated quality control data, is provided in Appendix B.

Closure soil samples collected on January 4, 2006 from UST 81533-146 contained no concentrations of TPH above the NJDEP health based criterion of 10,000 mg/kg total organic contaminants. Soil samples 906AC, 906AE and 906AW contained TPH concentrations of 5634 mg/kg, 6699 mg/kg and 195 mg/kg, respectively. Contingent VOA analysis was conducted on soil samples 906AC and 906AE. The only compounds detected above the method detection limits were in sample 906AE. Detected were ethylbenzene at 0.6 mg/kg and total xylenes at 0.8 mg/kg, which are below the NJDEP Residential Direct Contact Soil Cleanup Criteria of 1,000 mg/kg and 410 mg/kg, respectively.

3.2 GROUNDWATER SAMPLING RESULTS

One groundwater sample was collected via temporary PVC piezometer installed in soil borehole 906AC. There were two compounds detected above the method detection limits for the volatile organic analysis. Detected were ethylbenzene at 4.7 ug/L and total xylenes at 3.2 ug/L which are below the NJDEP Class II Groundwater Quality Criteria of 700 ug/L and No Limit Established, respectively. There were five compounds detected above the method detection limits for the semi-volatile organic analysis. Naphthalene was detected at 95.1 ug/L, which is below the regulatory level of No Limit Established. 2-Methyl-naphthalene was detected at 169.4 ug/L, which is below the regulatory level of No Limit Established. Phenanthrene was detected at 189.2 ug/L, which is below the regulatory level of No Limit Established. Pyrene was detected at 77.9 ug/L, which is below the regulatory level of 200 ug/L. Bis(2-Ethylhexyl)phthalate, a common laboratory contaminant, was detected at 13.8 ug/L which is below the regulatory level of 30 ug/L.

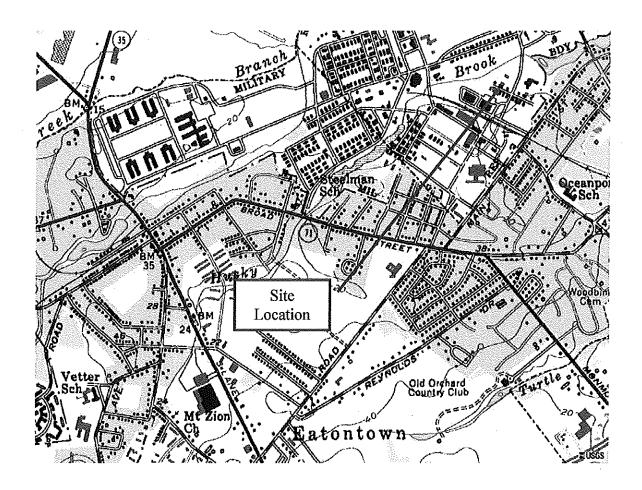
3.3 CONCLUSIONS AND RECOMMENDATIONS

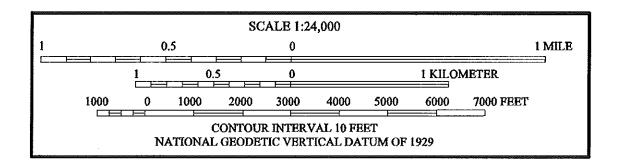
The analytical results for all soil and groundwater samples collected from the UST closure assessment at UST No. 81533-146 were below the regulatory limits.

Based on the closure soil sampling results, soils with TPH concentrations exceeding the NJDEP health based criterion for total organic contaminants of 10,000 mg/kg are not present at the location of UST No. 81533-146.

No Further Action is proposed in regard to the closure and site assessment of UST No. 81533-146 at Building 906A.

FIGURES

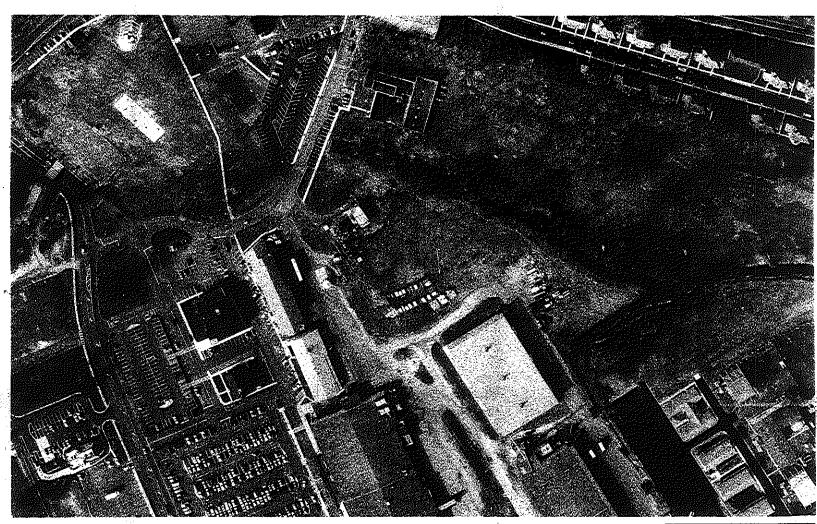




SOURCE: USGS 7½-MINUTE SERIES (TOPOGRAPHIC) LONG BRANCH QUADRANGLE, NEW JERSEY, 1981.

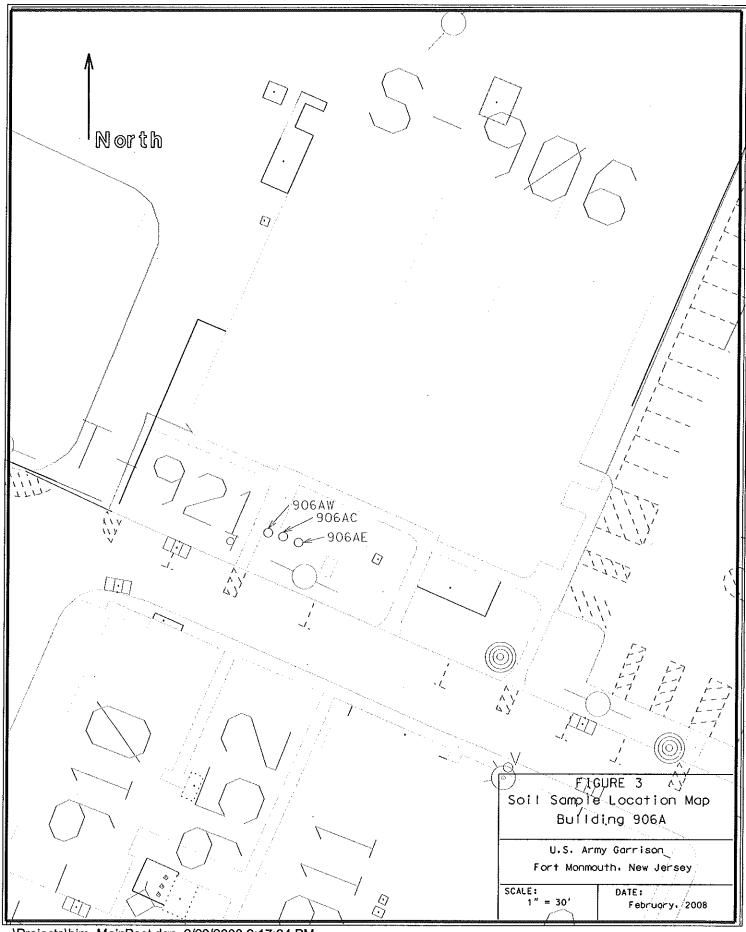
FIGURE 1

BUILDING 906 UST NO. 81533-146 FT. MONMOUTH, NJ



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SUMMARY OF LABORATORY ANALYSIS

FT. MONMOUTH, BUILDING 906A, UST No. 81533-146 4 January 2006

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL PARAMETER	ANALYTICAL METHOD
906AC	6000701	4-Jan-06	SOIL	ТРН	OQA-QAM-25
906AC	6000702	4-Jan-06	SOIL	TPH	OQA-QAM-25
906AE	6000704	4-Jan-06	SOIL	TPH	OQA-QAM-25
906AW	6000703	4-Jan-06	SOIL	TPH	OQA-QAM-25
906AC- Groundwater	6000705	4-Jan-06	AQUEOUS	VOA, SVOA	SW-846, EPA 625
Trip Blank	6004806	4-Jan-06	AQUEOUS	VOA	SW-846
Trip Blank	6004807	4-Jan-06	METHANOL	VOA	SW-846

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons, Method NJDEP OQA-QAM-25

VOA = Volatile Organic Analysis, EPA SW-846 Method 8260

SVOA = Semi-Volatile Organic Analysis in Water, EPA Method 625

SUMMARY OF LABORATORY ANALYTICAL RESULTS-SOIL

FT. MONMOUTH, BUILDING 906A, UST No. 81533-146 4 January 2006

TOTAL PETROLEUM HYDROCARBONS

SAMPLE ID	LABORATORY	SAMPLE LOCATION	SAMPLE	MATRIX	ТРН
	SAMPLE ID		DEPTH		RESULTS
			(in feet)		mg/kg
906AC	6000701	CENTER UST	3.5 – 4.0	Soil	693
906AC	6000702	CENTER UST	6.0 – 6.5	Soil	5635*
906AE	6000704	EAST END UST	3.5 – 4.0	Soil	6699*
906AW	6000705	WEST END UST	6.0 - 6.5	Soil	195

ABBREVIATIONS:

mg/kg = milligrams per kilogram = parts per million

ND = Compound Not Detected

NA = Compound Not Analyzed

*= Further Analyzed for Volatile Organic Compounds

Notes:

Gray shading indicates exceedance of NJDEP

health based criterion of 10,000 ppm total organic contaminants

SUMMARY OF LABORATORY ANALYTICAL RESULTS-SOIL

FT. MONMOUTH, BUILDING 906A, UST No. 81533-146 4 January 2006

VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	Benzene	Toluene	Ethylbenzene	Xylenes (total)
UNITS		mg/kg	mg/kg	mg/kg	mg/kg
906AC	6000702	ND	ND	ND	ND
906AE	6000703	ND	ND	0.6	0.8
Trip Blank		ND	ND	ND	ND
NJDEP Criteria	Residential	1	1,000	1,000	410

ABBREVIATIONS:

mg/kg = milligrams per kilogram = parts per million (ppm)

ND = Compound Not Detected

NA = Compound Not Analyzed

Notes

Gray shading indicates exceedance of NJDEP Residential Direct Contact Soil Cleanup Criteria

SUMMARY OF LABORATORY ANALYTICAL RESULTS-GROUNDWATER

FT. MONMOUTH, BUILDING 906A, UST No. 81533-146

4 January 2006

VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	Benzene	Ethyl- benzene	Toluene	Total Xylenes
	UNITS	ug/L	ug/L	ug/L	ug/L
906AC- Groundwater	6000705	ND	4.7	ND	3.2
Trip Blank		ND	ND	ND	ND
NJDEP Criteria	Ground Water Quality Crireria	1	700	1000	NLE

SEMI-VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	Naphtha- lene	2-Methyl- naphthalene	Phenan- threne	Pyrene	Bis(2Ethylhexyl) phthalate
UNITS		ug/L	ug/L	ug/L	ug/L	ug/L
906AC- Groundwater	6000705	95.1	169.4	189.2	77.9	3.2
NJDEP Criteria	Ground Water Quality Crireria	NLE	NLE	NLE	200	30

ABBREVIATIONS:

ug/L = Micrograms Per Liter = parts per billion

ND = Compound Not Detected

NA = Compound Not Analyzed

NLE= No Limit Established

Notes:

Gray shading indicates exceedance of NJDEP Class II Ground Water Quality Criteria

APPENDIX A CERTIFICATIONS



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1.	Company name and a	•	(as it	-
	appears on registratio	n quest	ionnaire)	ļ

OEH Bldg. # 167 OHn SELFM-EH Fort Monmouth NJ 07703

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

U.S. army Fort Monmouth Main Past West

3. Contact person for this activity:

Telephone Number: (908) 532-6223

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire: 1an K No. 58, 88, 95, 104, 110, 113, 146, 148, 158, 4, 163

Bdys. 283A, 614, 622, 676, 692, 701A, 906, 910, 1004, 1103

5. Registration Number (if known): UST - 単 00 8 15 33

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Signature:	JAMES OTT			
itle:	Acting Director Dir, Engineering an	d Housing Date:	2 2 NOV 1991	* *

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STATE OF NEW JERSEY DEPARTM OF ENVIRONMENTAL PROTECT Bureau of Underground Storage Tanks CN-029, Trenton, NJ 08625

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BITE ABBESSHENT COMPLIANCE STATEMENT

Supplement to the New Jersey Standard Reporting Form (Complete for ALL regulated UST abandonments or Zemovals)

Within ninety (90) days of completing the UST closure of any State or Federally-regulated tank, the owner or operator must submit this completed form to the NJDEP Bureau of Underground Storage Tanks. If the facility is located in one of the counties listed on the back, a copy of this form must also be sent to the Health Agency indicated.

The owner or operator of any Federally-regulated tank must also comply with the following:

40 CFR Part 280.72 Assessing the site at closure or change-in-service

"(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release."

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PACILIT	v U.S. Ormy Fort Monmouth WAT 00815	33 Tank No
	ff the following items as appropriate for the site.	58, 88, 95,
1	The UST facility is only regulated by State law, therein site assessment is not mandatory.	(11/2)148 150
quantification and the second	The UST facility is regulated by Federal law and a site	163.
The rest	ults of the site assessment indicate:	THE TO BE MUSTER
	There was NO release from the UST system.	
- Contracting of the Contraction	There was a release from the UST system and it reported to the DEP Environmental Hotline (609-292-717	
the DE	The results of the site assessment are not to be sub P or Bealth Agency unless requested to do so. The re Evailable for inspection at the UST facility.	mitted to sults are

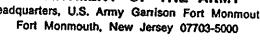
Questions can be directed to the Bureau at (609) 984-3156.

*** This registration form shall be signed by the highest ranking facility (7:14B-2.3 (a) 1). ***	2.0 1101
"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment. SACS-2,1/89	IAMES OTT Icting Director In Engineering and Housing (Title)



DEPARTMENT OF THE ARMY

Headquarters, U.S. Army Garrison Fort Monmouth Fort Monmouth, New Jersey 07703-5000





REPLY TO ATTENTION OF

Directorate of Engineering and Housing

2 2 NOV 1991

SUBJECT: Removal Procedure:

U.S. Army Fort Monmouth Main Post West Site Registration #0081533 Tank #58, 88, 95, 104, 110, 113, 146, 148, 158, 163 POC: Joseph M. Fallon (908) 532-6223

The remaining product inside each tank was removed for disposal by Lionetti Oil Recovery Co., Inc. Lionetti is a licensed hazardous waste transporter and treatment, storage, and disposal facility (USEPA ID #NJD084044064).

The top of each tank was excavated and cut open across the entire length of the tank. In addition, the inside of each tank was hand cleaned and thoroughly wiped down. The soil from the top of each excavation was visually inspected and analyzed using a HNU Model PI-101 photoionizer. No contamination was detected.

After each tank was cleaned, a visual inspection was made inside the tanks for signs of leakage. No corrision was found inside the tanks.

Each tank was then removed from the ground and disposed of through a metal recycler. No contamination was discovered at the sites upon removing the tanks.

Each site was then backfilled with the excavated soil to close out the project.

APPENDIX B

SOIL AND GROUNDWATER ANALYTICAL DATA PACKAGE

FORT MONMOUTH ENVIRONMENTAL

TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732) 532-4359 FAX: (732) 532-6263 WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

CERTIFICATIONS: NJDEP #13461, NYSDOH #11699



ANALYTICAL DATA REPORT

Fort Monmouth Environmental Laboratory ENVIRONMENTAL DIVISION

Fort Monmouth, New Jersey PROJECT: BLDG. 906A

Bldg. 906A

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
906A C 3.5-4.0'	6000701	Soil	04-Jan-06 13:44	01/04/06
906A C 6.0-6.5'	6000702	Soil	04-Jan-06 13:54	01/04/06
906A E 3.5-4.0'	6000703	Soil	04-Jan-06 14:18	01/04/06
906A W 6.0-6.5'	6000704	Soil	04-Jan-06 14:35	01/04/06
906A C	6000705	Aqueous	04-Jan-06 15:02	01/04/06

ANALYSIS:

FORT MONMOUTH ENVIRONMENTAL LAB VOA+15, BN+15, TPHC, % SOLIDS

ENCLOSURE: CHAIN OF CUSTODY RESULTS

(QC and raw data not included for brevity)

Daniel Wright/Pate

1-27-06

Laboratory Director

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CHAIN OF CUSTODY



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: John M. Carthy Project No:				880	Analysis Parameters Comments:										
Phone: X2 6	224	Location:			-4			λ_{λ}							
()DERA ()OMA	()Other:	(For	mer US	ST)		+	77	7							
Samplers Name / C	ompany: George Br			Sample	#	1 d	† Ø	BN+15							
LIMS/Work Order#	Sample Location	Date	Time	Туре	bottles	7	>	Q						Remarks / Pres	ervation Method
(00007 01	906AC 35-4.0		1344	Soil	2	Χ								4397	across awater
U O O	906 AC 6.0-6.5		1354		2_	X								4398	Stained
1 1/3	906AF 35-4.0		1418	·) ·	2	X								4399	Across Water
04	906AW 6.0-6.5		1435	1	2	X								4400	
-05	906AC	1	1502	AR	3		X	X							
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		AL		M			**************************************								
Relinquished by (signat	Received by	(signature):		Relino	_		mature)				Received by (signature):				
Report Type: ()Full, (Reduced, ()Standard, ()Scre	en / non-certifi	ed, (_)EDD			Rema	rks: V	10+	-10	0 n S	5%	>10	00 0	PPMTP	Н
Turnaround time: USta	ndard 3 wks, ()RushDays,	()ASAP Ver	balHrs.			5	hai	red	T;	Rip	ω	;+L	62	95 Al 1/20	ar.
Report Type: ()Full, ()Reduced, ()Standard, ()Screen/non-certified, ()EDD Remarks: VO+10 on 25% > 1000 PPH TPH Turnaround time: ()Standard 3 wks, ()Rush_Days, ()ASAP Verbal_Hrs. Shaved TRIP W; th 6395 H1 20 10.															

SAMPLE RECEIPT FORM

Date Received:	12	4-00	. Work Order	ID#: _	OUNT			
Site/Proj. Name: Blog 900A BT Cooler Temp (°C): 38								
Received By: VICHIA Sign: Sign: Sign: Sign: Sign: Received By: (Print name)								
		Check the app	<u>ropriate box</u>	A.	/			
1. Did the sample	es com	e in a cooler?		Z yes	s□ no □ n/a			
•		n good condition?		2 yes	s □ no			
		tody filled out correc	· - · /	Z yes	s □ no			
		tody signed in the ar		Z yes	s □ no			
		with the chain of cus		⊬ yes	i∐ no			
· ·		tainers/preservatives			s∐ no			
		unt of sample suppli	ed?		no .			
	-	sent in VOA vials?			i⊿no □ n/a			
9. Were samples				•	no			
10. Were analyze	-imme	diately tests perform	i within 15 minutes i	⊔ yes	⊔ no⊅⊒r n/a			
Fill out the fo	llow	ing table for eac	ch sample bottl	e				
Lims ID	рН	Preservative	Sample ID	рH	Preservative			
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***************************************			•	l				
Comments:	Comments:							
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Change of Chain of Custody

 Was sufficient Are samples 	d:	tests indicated? Yes No No No				
Sample ID#	New Analysis	Sample ID#	New Analysis			
(00070Z	1001 + 15	11011	Amarysis			
	W146 13					
03						
	100		2 (3)			
AISO T	of WetNand L	B 6000	0606			
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Comments:						

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Former UST 906A Sample Location GPS Positions

US State Plane 1983 New Jersey (NY East) 2900 NAD 1983 (Conus) Geoid 96 (Conus)

(In US Survey Feet)

Position	Northing (Y Coord.)	Easting (X Coord.)
906A E	539090.168	621094.799
906A C	539088.953	621099,520
906A W	539087.046	621104.447

METHOD SUMMARY

Methodology Summary

EPA Method 624 Gas Chromatographic Determination of Volatiles in Water

Surrogates and internal standards are added to a 5-ml aliquot of sample. The sample is then purged and desorbed into a GC/MS system. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Volatiles are identified and quantitated.

EPA SW-846 Method 8260 Gas Chromatographic Determination of Volatiles in Methanol

A 10-gram volume of soil is combined with 25-ml of Methanol and surrogates in the field. Internal standards are added and the sample is placed on a purge and trap concentrator. The sample as purged and desorbed into a GC/MS system. Volatiles are identified and quantitated. The final concentration is calculated using soil weight, percent moisture and concentration.

EPA Method 625 Gas Chromatographic Determination of Semi-volatiles in Water

Surrogates are added to a measured volume of sample, usually 1 liter, at a specified pH. The sample is serially extracted with Methylene Chloride using a separatory funnel. The extract is concentrated and internal standards are added. The sample is injected into a GC/MS system. Semi-volatiles are identified and quantitated.

NJDEP Method OQA-QAM-025 10/97 Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

Fifteen grams (15g) of soil is added to a 125-ml acid cleaned and solvent rinsed capped Erlenmeyer flask. 15g anhydrous Sodium Sulfate is added to dry the sample. Surrogate standard spiking solution is then added to the flask.

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

The extract is then injected directly into a GC-FID for analysis. The sample is analyzed for Petroleum Hydrocarbons covering a range of C8-C42, including Pristane and Phytane. Total Petroleum Hydrocarbon concentration is determined by integrating between 5 minutes and 22 minutes. The baseline is established by starting the integration after the end of the solvent peak and stopping after the last peak. The final concentration of Total Petroleum Hydrocarbons is calculated using percent moisture, sample weight and concentration.

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID: 60007

Site: UST

Bldg. 906A

		Date	Hold Time
Da	te Sampled	01/04/06	NA
Re	ceipt/Refrigeration	01/04/06	NA
Ex	tractions		
1. 2.	BN TPHC	01/09/06 01/06/06	7 days 14 days
An	alyses		
1. 2. 3.	VOA BN TPHC	01/11,17/06 01/17/06 01/07/06	14 days 40 days 40 days

CONFORMANCE/ NONCONFORMANCE SUMMARY

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

			Indicate Yes, No, N/A
1.		ed/Compounds identified and method blanks)	yes
2.	Retention times for cl	romatograms provided	yes_
3.	GC/MS Tune Specifi	cations	
	a. b.	BFB Meet Criteria DFTPP Meet Criteria	yes yes
4.	GC/MS Tuning Frequencies and 12 hours for	ency – Performed every 24 hours for 600 r 8000 series	yes
5.	analysis and continuin	Initial Calibration performed before sample ag calibration performed within 24 hours of 00 series and 12 hours for 8000 series	<u>yes</u>
6.	GC/MS Calibration re	quirements	
	а. ъ.	Calibration Check Compounds Meet Criteria System Performance Check Compounds Meet Criteria	<u>yes</u> <u>yes</u>
7.	Blank Contamination	If yes, List compounds and concentrations in each blank:	No
	a. b. c.	VOA Fraction B/N Fraction Acid Fraction	
3.	Surrogate Recoveries	Meet Criteria	<u>00</u>
	If not met, list the outside the accept	se compounds and their recoveries, which fall able range:	
	b. с.	VOA Fraction B/N Fraction Acid Fraction ne calculations checked and the results qualified	
).	as "estimated"? Matrix Spike/Matrix S	pike Duplicate Recoveries Meet Criteria compounds and their recoveries, which fall	Lyes_
	•	VOA Fraction <u>Uarphillalene</u> M5+M5D low B/N Fraction <u>Benzidine</u> M5D low <u>RPD high</u> Acid Fraction VM1005 out on Soil VOA See form	

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)

		Indicate Yes, No, N/A
10.	Internal Standard Area/Retention Time Shift Meet Criteria (If not met, list those compounds, which fall outside the acceptable range)	yes
	a. VOA Fraction	
	b. B/N Fraction	_
	c. Acid Fraction	-
11.	Extraction Holding Time Met	<u>yes</u>
	If not met, list the number of days exceeded for each sample:	• - -
12.	Analysis Holding Time Met	<u> yes</u>
	If not met, list the number of days exceeded for each sample:	<u></u>
Add	itional Comments:	-
Labo	oratory Manager: Date: 1-27 -0	<u> </u>

TPHC CONFORMANCE/NON-CONFORMANCE SUMMARY REPORT

		Indicate Yes, No, N/A
1.	Method Detection Limits Provided	405
2.	Method Blank Contamination – If yes, list the sample and the corresponding concentrations in each blank	<u>NO</u>
3.	Matrix Spike Results Summary Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)	yes
4.	Duplicate Results Summary Meet Criteria	yes
5.	IR Spectra submitted for standards, blanks and samples	_NA_
5.	Chromatograms submitted for standards, blanks and samples if GC fingerprinting was conducted	yes
7.	Analysis holding time met (If not met, list number of days exceeded for each sample)	yes
Addıt	ional comments;	
Labor	atory Manager:Date:	_

VOLATILE ORGANICS (AQUEOUS)

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY NJDEP CERTIFICATION # 13461

Definition of Qualifiers

- U: The compound was analyzed for but not detected.
- B: Indicates that the compound was found in the associated method blank as well as in the sample.
- J: Indicates an estimated value. This flag is used:
 - (1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.
 - (2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.
- D: This flag is used to identify all compounds (target or TIC) that required a dilution.
- E: Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.
- N: This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

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

-Data File Operator Date Acquired VB021318.D

Skelton

11 Jan 2006 8:48 pm

Sample Name Field ID

MB 11Jan2006 MB 11Jan2006

Sample Multiplier

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	. 5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol .			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	1
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	**************************************
74-87-3	Chloromethane			not detected .	nle	0.24 ug/L	2.00 ug/L	1.
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane	,		not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	5000	0.36 ug/L	2.00 ug/L	ļ
75-15-0	Carbon Disulfide	***************************************	1	not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected		0.24 ug/L	·	
156-60-5	trans-1.2-Dichloroethene				3		2.00 ug/L	
75-34-3	1,1-Dichloroethane		 	not detected	100	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate	W.W	 	not detected	50	0.24 ug/L	2.00 ug/L	
78-93-3			<u> </u>	not detected	7000	0.20 ug/L	2.00 ug/L	
	2-Butanone		ļ\	лоt detected	300	0.26 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	70	0.22 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane		<u> </u>	not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride	<u> </u>		поt detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	L
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	ı	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nlé	0.23 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene	*****		not detected	1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.43 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform		 	not detected		0.27 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	4	0.45 ug/L	2.00 ug/L 2.00 ug/L	
541-73-1	1,3-Dichlorobenzene		 		1 1		''''	
			 	not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene		l	not detected	600	0.45 ug/L	2.00 ug/L	

^{*}Results between MDL and RL are estimated values

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

R.L. = Reporting Limit

^{*}Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

Lab Name:	FMETL				NJDEP#	: 13461		MB 11Jan2	2006
Project:	0634880	0634880 Case No.: 6			Location: 906A SDG No.: U				
Matrix: (soil/v	vater)	WATER	_		. L	ab Sample	— ∍ ID:	MB 11Jan2006	3
Sample wt/vo	ol:	5.0	(g/mi) <u>N</u>	/L	_ L	ab File ID:		VB021318.D	
Level: (low/n	ned)	LOW	_		С	ate Receiv	ved:	1/4/2006	_
% Moisture: r	not dec.		·			ate Analyz	zed:	1/11/2006	
GC Column:	RTX50	02. ID: 0.2	<u>.5</u> (mm	1)		ilution Fac	tor:	1.0	
Soil Extract Volume: (uL)				S	oil Aliquot	Volur	me:	(uL)	
		CONCENTRATION UNITS:							
Number TICs	found:	1	····	(ug/l	L or ug/Ko	g) <u>UG</u>	/L		
CAS NO.		COMPOU	ND NAME	.		RT	ES	T. CONC.	Q
1. 000079	3-20-9	Acetic acid	methyl e	ster		12.47	†	1	181

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

Data File Operator Date Acquired VB021320.D

Skelton

11 Jan 2006 10:10 pm

Sample Name Field ID

6000606 Trip Blank

Sample Multiplier

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualific
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile		,	not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	0001	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nla	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	I	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	1
75-00-3	Chloroethane			not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane	<u></u>		· not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	· · · · · · · · · · · · · · · · · · ·
75-09-2	Methylene Chloride			not detected	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1.1-Dichloroethane			not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	
1.56-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	70	0.20 ug/L	2.00 ug/L	
71-55-6	I, I, I-Trichloroethane	-		not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride	4		not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L		
79-01-6	Trichloroethene	,					2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1 1	0.26 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1 1	0.24 ug/L	2.00 ug/L	
1 10-75-8				not detected	1	0.22 ug/L	2.00 ug/L	
10061-01-5	2-Chloroethyl vinyl ether		+	not detected	nle	0.23 ug/L	2.00 ug/L	
	cis-1,3-Dichloropropene			not detected	1 1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			лоt detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 цg/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1 1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	11	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nie	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1 1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L .	
106-46-7	1,4-Dichlorobenzene		'	not detected	. 75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene		· · · · · · · · · · · · · · · · · · ·	not detected	600	0.45 ug/L	2.00 ug/L	

*Results between MDL, and RL, are estimated values

*Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name;	FMETL		NJDEP#: 13461	Trip B	lank
Project:	0634880	Case No.: 60006	Location: 637	SDG No.: US	Γ
Matrix: (soil/	water) <u>WAT</u>	ER	Lab Sample ID	: 6000606	
Sample wt/vo	ol: <u>5.0</u>	(g/ml) ML	Lab File ID:	VB021320.D	
Level: (low/n	ned) <u>LOW</u>		Date Received:	1/4/2006	
% Moisture: i	not dec.		Date Analyzed:	1/11/2006	
GC Column:	RTX502. ID	0.25 (mm)	Dilution Factor:	1.0	
Soil Extract V	/olume:	(uL)	Soil Aliquot Vol	ume:	(uL)
Number TICs	s found:		ONCENTRATION UNITS: g/L or ug/Kg) UG/L	<u> </u>	
CAS NO.	сом	POUND NAME	RT E	ST. CONC.	Q
1. 000079	9-20-9 Acetic	acid, methyl ester	12.47	4	JN

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

Data File Operator Date Acquired VB021321.D

Skelton

11 Jan 2006 10:51 pm

Sample Name Field ID 6000705 906AC

Sample Multiplier

1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL,	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	Quantities
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	1
75718	Dichlorodifiuoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	·
75-00-3	Chloroethane .			not detected	nle	0.29 ug/L	2.00 tg/L	+
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1.1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone		,	not detected	6000	0.19 ug/L		
75-15-0	Carbon Disulfide		· · · · · · · · · · · · · · · · · · ·	not detected			2.00 ug/L	
75-09-2	Methylene Chloride		T	not detected	700	0.24 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene		† · · · · · · · · · · · · · · · · · · ·	not detected		0.21 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane		 	not detected	100	0.24 ug/L	2.00 ug/L	,
108-05-4	Vinyl Acetate				50	0.24 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	7000	0.20 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	300	0.26 ug/L	2.00 ug/L	
67-66-3	Chloroform Chloroform			not detected	70	0.20 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	70	0.22 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride		<u> </u>	not detected	30	0.20 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	- 1 1	0.24 ug/L	2.00 ug/L	
79-01-6	Trichloroethene		-	not detected	2	0.23 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.26 ug/L	2.00 ug/L	
75-27-4	Bromodichioromethane	····		not detected	1	0.24 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether		 	not detected	1	0.22 ug/L	2.00 ug/L	
10061-01-5	cis-1.3-Dichloropropene			not detected	nle	0.23 ug/L	2.00 ug/L	
108-10-1			<u> </u>	not detected	1	0.22 ug/L	2.00 ug/L	
108-88-3	4-Methyl-2-Pentanone Toluene			not detected	nle	0.35 ug/L	2.00 ug/L	
10061-02-6				not detected	1000	0.26 ug/L	2.00 ug/L	ļ
	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	<u> </u>
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	<u> </u>
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	<u> </u>
108-90-7	Chlorobenzene	A	055555	not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene	25.72	865653	4.71 ug/L	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes	26.01	70702	1.05 ug/L	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene	26.84	299933	2.16 ug/L	nle	0.21 ug/L	2.00 ug/L	
100-42-5 75-25-2	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	ļ
	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	ļ
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L,	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene		ļ	not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	

^{*}Results between MDL and RL are estimated values

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

R.L. = Reporting Limit

^{*}Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FI	EL	D I	D
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Lab Name:	FMETL	·	<u>, </u>	NJDEP#: 13461	906AC	
Project:	063488	0	Case No.: 60006	Location: 637 S	DG No.: UST	
Matrix: (soil/	water)	WATE	R	Lab Sample ID:	6000705	
Sample wt/vo	ol:	5.0	(g/ml) ML	Lab File ID:	VB021321.D	
Level: (low/r	ned)	LOW	····	Date Received:	1/4/2006	_
% Moisture:	not dec.			Date Analyzed:	1/11/2006	_
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	Dilution Factor:	1.0	_
Soil Extract \	Volume:		(uL)	Soil Aliquot Volu	me:	_ _ (uL
			CC	NCENTRATION UNITS:		

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

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000526-73-8	Benzene, 1,2,3-trimethyl-	29.36	39	JN
2. 000496-11-7	Indane	30.51	77	JN
3. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	31.14	15	JN
4. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	31.32	25	JN
5. 000767-58-8	Indan, 1-methyl-	31.59	29	JN
6. 000095-93 - 2	Benzene, 1,2,4,5-tetramethyl-	32.12	13	JN
7. 000095-93-2	Benzene, 1,2,4,5-tetramethyl-	32,23	23	JN
8. 000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	32.69	20	JN
9. 002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	33.09	67	JN
10. 000119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	33,42	19	JN

Number TICs found:

10

VOLATILE ORGANICS (SOIL)

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

MB 17Jan2006

Lab Name: **FMETL** NJDEP#: 13461 Project: 0634880 Case No.: 60007 SDG No.: UST Location: 906A Matrix: (soil/water) SOIL Lab Sample ID: MB 17Jan2006 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB021392.D Level: (low/med) MED Date Received: 1/4/2006 % Moisture: not dec. Date Analyzed: 1/17/2006 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 Soil Aliquot Volume: 125 (uL) (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	1000	U
107131	Acrylonitrile	1000	Ü
75650	tert-Butyl alcohol	1000	Ū
1634044	Methyl-tert-Butyl ether	100	Ū
108203	Di-isopropyl ether	100	Ū
75718	Dichlorodifluoromethane	100	Ū
<u>74-</u> 87-3	Chloromethane	100	Ū
75-01-4	Vinyl Chloride	100	U
74-83-9	Bromomethane	100	U
75-00 - 3	Chloroethane	100	U
_75-69-4	Trichlorofluoromethane	100	U
<u>75-35-4</u>	1,1-Dichloroethene	100	U
67-64-1	Acetone	100	U
75-15-0	Carbon Disulfide	100	U
75-09-2	Methylene Chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
75-34-3	1,1-Dichloroethane	100	U
108-05-4	Vinyl Acetate	100	U
78-93-3	2-Butanone	100	U
<u> 156-59-2</u>	cis-1,2-Dichloroethene	100	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon Tetrachloride	100	U
71-43-2	Benzene	100	U
107-06-2	1,2-Dichloroethane	100	U
79-01-6	Trichloroethene	100	U
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
110-75-8	2-Chloroethyl vinyl ether	100	U
10061-01-5	cis-1,3-Dichloropropene	100	· U
108-10-1	4-Methyl-2-Pentanone	100	U
108-88-3	Toluene	100	U
10061 - 02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
127-18-4	Tetrachloroethene	100	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	100	U
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	100	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

MB 17Jan2006

Lab Name: **FMETL** NJDEP#: 13461 Project: 0634880 Case No.: 60007 Location: 906A SDG No.: UST Matrix: (soil/water) SOIL Lab Sample ID: MB 17Jan2006 Sample wt/vol: 10.0 (g/ml) G Lab File ID: VB021392.D Level: (low/med) MED Date Received: 1/4/2006 % Moisture: not dec. 0 Date Analyzed: 1/17/2006 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 125 (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes	200	l II
95-47-6	o-Xylene	100	Ü
100-42-5	Styrene	100	Ü
75-25-2	Bromoform	100	li i
79-34-5	1,1,2,2-Tetrachioroethane	100	1)
541-73-1	1,3-Dichlorobenzene	100	11 .
106-46-7	1,4-Dichlorobenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	Ü
91-20-3	Naphthalene	100	- i i

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

Lab Name:	FMETL	·		NJDEP	#:	13461		MB 17Jan	2006
Project:	063488	0	Case No.: 6000	D7 Loca	tion:	906A	SI	DG No.: UST	
Matrix: (soil/v	water)	SOIL		-	Lab (Sample	ID:	MB 17Jan2006	3
Sample wt/vo	ol:	10.0	(g/ml) <u>G</u>	·	Lab I	File ID:		VB021392.D	
Level: (low/n	ned)	MED			Date	Receiv	ed:	1/4/2006	<u>-</u>
% Moisture: r	not dec.	0	· .	J	Date	Analyz	ed:	1/17/2006	
GC Column:	RTX5	02. ID:	0.25 (mm)	l	Diluti	on Fac	tor:	1.0	
Soil Extract V	/olume:	25000	(uL)		Soil A	Aliquot '	Volun	ne: 125	 (uL)
Number TICs	s found:	0		CONCENTR (ug/L or ug/k		ON UNI UG/			
CAS NO.		СОМЕ	OUND NAME			RT	EST	T. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

Lab Name:	FMETI	<u> </u>		NJDEP#: 13461	Trip Blank
Project:	06348	80	Case No.: 60007	Location: 906A SD	G No.: UST
Matrix: (soil/	water)	SOIL		Lab Sample ID: 6	000606
Sample wt/v	ol:	10.0	(g/ml) <u>G</u>	Lab File ID: V	B021393.D

Level: (low/med) MED Date Received: 1/4/2006
% Moisture: not dec. 0 Date Analyzed: 1/17/2006

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

Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 125 (uL)

	CONCENTRATION UNITS:				
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
107028	Acrolein		1000	U	
107131	Acrylonitrile		1000	U	
75650	tert-Butyl alcoho	ol .	1000	T Ŭ	
1634044	Methyl-tert-Buty		100	Ü	
108203	Di-isopropyl eth		100	Ü	
75718	Dichlorodifluoro		100	U	
74-87-3	Chloromethane		100	Ü	
75-01-4	Vinyl Chloride		100	Ü	
74-83-9	Bromomethane		100	Ū	
75-00-3	Chloroethane	•	100	ŭ	
75-69-4	Trichlorofluorom	nethane	100	Ū	
75-35-4	1,1-Dichloroethe		100	Ü	
67-64-1	Acetone		440		
75-15-0	Carbon Disulfide	9	100	U	
75-09 - 2	Methylene Chlor	ride	100	Ü	
156-60-5	trans-1,2-Dichlo	roethene	100	Ŭ	
75-34-3	1,1-Dichloroetha		100	Ū	
108-05-4	Vinyl Acetate		100	Ü	
78-93-3	2-Butanone		100	Ü	
156-59-2	cis-1,2-Dichloro	ethene	100	Ü	
67-66-3	Chloroform		100	Ŭ	
71-55-6	1,1,1-Trichloroet	thane	100	Ū	
56-23-5	Carbon Tetrachl	oride	100	U	
71-43-2	Benzene		100	Ū	
107-06-2	1,2-Dichloroetha	ine	100	Ü	
79-01-6	Trichloroethene		100	Ū.	
78-87-5	1,2-Dichloroprop	ane	100	U	
75-27-4	Bromodichlorom		100	Ü	
110-75-8	2-Chloroethyl vir	vl ether	100	Ū·	
10061-01-5	cis-1,3-Dichloror		100	Ū	
108-10-1	4-Methyl-2-Penta		100	Ü	
108-88-3	Toluene		100	Ū	
10061-02-6	trans-1,3-Dichlor	ropropene	100	Ŭ	
79-00-5	1,1,2-Trichloroet		100	Ü	
127-18-4	Tetrachloroether		100	Ü	
591-78-6	2-Hexanone		100	Ü	
124-48-1	Dibromochlorom	ethane	100	Ü	
108-90-7	Chlorobenzene		100	Ü	
100-41-4	Ethylbenzene		100	U	

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

Lab Name:	FMETL			NJDEP#: 13461	Trip Blank
Project:	063488	0	Case No.: 60007	Location: 906A	SDG No.: UST
Matrix: (soil/v	vater)	SOIL		Lab Sample ID	: 6000606
Sample wt/vc	ol:	10.0	(g/ml) <u>G</u>	Lab File ID:	VB021393.D
Level: (low/n	ned)	MED	·	Date Received:	1/4/2006
% Moisture: r	not dec.	0		Date Analyzed:	1/17/2006
GC Column:	RTX50	<u>)2.</u> ID:	0.25 (mm)	Dilution Factor:	1.0
Soil Extract V	'olume:	25000	(uL)	Soil Aliquot Vol	ume: 125 (u

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG		Q
1330-20-7	m+p-Xylenes			200	11
95-47-6	o-Xylene			100	- i i
100-42-5	Styrene			100	II.
75-25-2	Bromoform			100	11
79-34-5	1,1,2,2-Tetrachlo	roethane		100	II
541-73-1	1,3-Dichlorobenz			100	
106-46-7	1,4-Dichlorobenz			100	
95-50-1	1,2-Dichlorobenz			100	<u>U</u>
91-20-3	Naphthalene			100	<u>U</u>

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

EST. CONC.

330

460

Q

JN

JN

RT

12.50

17.39

Lab Name:	FMETL		NJDEP#: 13461	Trip Blank
Project:	0634880	Case No.: 60007	Location: 906A SD	G No.: UST
Matrix: (soil/	water) SOIL		Lab Sample ID: 6	6000606
Sample wt/vo	ol: <u>10.0</u>	(g/ml) G	Lab File ID: V	/B021393.D
Level: (low/r	med) <u>MED</u>		Date Received: 1	/4/2006
% Moisture:	not dec. 0		Date Analyzed: 1	/17/2006
GC Column:	RTX502. ID:	0.25 (mm)	Dilution Factor: 1	.0
Soil Extract \	/olume: 25000	(uL)	Soil Aliquot Volum	e: <u>125</u> (uL)
		(CONCENTRATION UNITS:	
Number TICs	s found: 2	· · · · · · · · · · · · · · · · · · ·	(ug/L or ug/Kg) UG/KG	

COMPOUND NAME

Acetic acid, methyl ester Silane, dimethoxydimethyl-

CAS NO.

1. 000079-20-9

2. 001112-39-6

(uL)

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

906AC

(uL)

Lab Name: **FMETL** NJDEP#; <u>13461</u> Project: 0634880 Case No.: 60007 SDG No.: UST Location: 906A Matrix: (soil/water) SOIL Lab Sample ID: 6000702 Sample wt/vol: 10.5 (g/ml) G Lab File ID: VB021394.D Level: (low/med) MED Date Received: 1/4/2006 % Moisture: not dec. 5.94 Date Analyzed: 1/17/2006 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000

CONCENTRATION UNITS:

Soil Aliquot Volume: 125

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein	1000	U
107131	Acrylonitrile	1000	Ū
75650	tert-Butyl alcohol	1000	Ū
1634044	Methyl-tert-Butyl ether	100	Ū
108203	Di-isopropyl ether	100	Ü
75718	Dichlorodifluoromethane	100	Ü
74-87-3	Chloromethane	100	U
75-01-4	Vinyl Chloride	100	U
74-83-9	Bromomethane	100	U
75-00-3	Chloroethane	100	Ü
75-69 <i>-</i> 4	Trichlorofluoromethane	100	U
75-35-4	1,1-Dichloroethene	100	Ü
67-64-1	Acetone	430	····
_75-15-0	Carbon Disulfide	100	Ü
_75-09-2	Methylene Chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	Ü
75-34-3	1,1-Dichloroethane	100	U
108-05-4	Vinyl Acetate	100	Ū
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	100	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon Tetrachloride	. 100	U
_71-43-2	Benzene	100	U
107-06-2	1,2-Dichloroethane	100	U
79-01-6	Trichloroethene	100	U
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
110-75-8	2-Chloroethyl vinyl ether	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
108-10-1	4-Methyl-2-Pentanone	100	U
108-88-3	Toluene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
127-18-4	Tetrachloroethene	100	U
591-78-6	2-Hexanone	100	Ü
124-48-1	Dibromochloromethane	. 100	· U
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	57	J

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD II	_

	• '				906AC	
_ab Name:	FMETL			NJDEP#: <u>13461</u>	• • • • • • • • • • • • • • • • • • • •	
Project:	0634880	0	Case No.: 60007	Location: 906A SD	G No.: UST	
Matrix: (soil/v	water)	SOIL		Lab Sample ID: 6	3000702	
Sample wt/vo	ol:	10.5	(g/ml) <u>G</u>	Lab File ID:	VB021394.D	
_evel: (low/n	ned)	MED	 -	Date Received: 1	1/4/2006	
% Moisture: ı	not dec.	5.94		Date Analyzed: _1	1/17/2006	
GC Column:	RTX50	02. ID:	<u>0.25</u> (mm)	Dilution Factor: 1	1.0	
Soil Extract \	/olume:	25000	(uL)	Soil Aliquot Volum	ne: 125	(uL)

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
1330-20-7	m+p-Xylenes		26	J
95-47-6	o-Xylene		96	J
100-42-5	Styrene		100	U
75-25-2	Bromoform		100	U
_79 - 34-5	1,1,2,2-Tetrachle	oroethane	100	U
541-73 - 1	1,3-Dichloroben:	zene	100	U
106-46-7	1,4-Dichlorobena	zene	100	U
95-50-1	1,2-Dichloroben	zene	100	U
91-20-3	Naphthalene		100	Ü

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

906AC Lab Name: **FMETL** NJDEP#: 13461 Project: 0634880 Case No.: 60007 SDG No.: UST Location: 906A Matrix: (soil/water) SOIL Lab Sample ID: 6000702 Sample wt/vol: 10.5 (g/ml) G Lab File ID: VB021394.D Level: (low/med) MED Date Received: 1/4/2006 % Moisture: not dec. 5.94 Date Analyzed: 1/17/2006 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 (uL) Soil Aliquot Volume: 125 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG Number TICs found: 10

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000526-73-8	Benzene, 1,2,3-trimethyl-	29.36	13000	JN
2. 000493-02-7	Naphthalene, decahydro-, trans-	30.36	11000	JN
3. 001074-43-7	Benzene, 1-methyl-3-propyl-	30.47	8200	JN
4. 000141-93-5	Benzene, 1,3-diethyl-	30.56	6900	JN
5. 000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	31.32	8100	JN
6.	unknown	31.54	5400	J
7.	unknown	31.60	8800	J
8. 002958-76-1	Naphthalene, decahydro-2-methyl	32.02	6100	JN
9. 000527-84-4	Benzene, 1-methyl-2-(1-methylet	32.23	6200	JN
10.	unknown	33.09	8000	J

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

906AE

FMETL Lab Name: NJDEP#: 13461

Project: 0634880 Case No.: 60007 SDG No.: UST Location: 906A

SOIL Matrix: (soil/water) Lab Sample ID: 6000703

(g/ml) G Sample wt/vol: 10.2 Lab File ID: VB021395.D Level: (low/med) MED

Date Received: 1/4/2006 % Moisture: not dec. 11.21

Date Analyzed: 1/17/2006

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

Soil Extract Volume: 25000 (uL) (uL) Soil Aliquot Volume: 125

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
107028	Acrolein		1100	U
107131	Acrylonitrile		1100	· U
75650	tert-Butyl alcohol		1100	U
1634044	Methyl-tert-Butyl eth	er	110	Ú
108203	Di-isopropyl ether		110	U
75718	Dichlorodifluorometl	nane	110	5
74-87-3	Chloromethane		110	_ _
75-01-4	Vinyl Chloride		110	J
74-83-9	Bromomethane		110	C
75-00-3	Chloroethane		110	Ü
75-69-4	Trichlorofluorometha	ane	110	Ü
75-35-4	1,1-Dichloroethene		. 110	U
67-64-1	Acetone		450	
75-15-0	Carbon Disulfide		110	U
75-09-2	Methylene Chloride		110	U
156-60-5	trans-1,2-Dichloroet	hene	110	U
75-34-3	1,1-Dichloroethane		110	Ü
108-05-4	Vinyl Acetate		110	U
78-93-3	2-Butanone		-110	J
156-59-2	cis-1,2-Dichloroethe	ne	110	
67-66-3	Chloroform		-110	J
71-55-6	1,1,1-Trichloroethan	i e	110	J
56-23-5	Carbon Tetrachlorid	e ·	110	U
71-43-2	Benzene		110	J
107-06-2	1,2-Dichloroethane	,	110	U
79-01-6	Trichloroethene		110	U
78-87-5	1,2-Dichloropropane)	-110	U
75-27-4	Bromodichlorometh		110	U
110-75-8	2-Chloroethyl vinyl e	ther	110	U
10061-01-5	cis-1,3-Dichloroprop	ene	110	U
108-10-1	4-Methyl-2-Pentano	ne	110	U
108-88-3	Toluene		110	U
10061-02-6	trans-1,3-Dichloropr	opene	110	U
79-00-5	1,1,2-Trichloroethar		110	U
127-18-4	Tetrachloroethene		110	U
591-78-6	2-Hexanone		110	U
124-48-1	Dibromochlorometh	ane	110	U
108-90-7	Chlorobenzene		110	U
100-41-4	Ethylbenzene		. 600	

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD ID:

906AE

Lab Name: FMETL NJDEP#: 13461 0634880 Project: SDG No.: UST Case No.: 60007 Location: 906A Matrix: (soil/water) SOIL Lab Sample ID: 6000703 Sample wt/vol: 10.2 (g/ml) G Lab File ID: VB021395.D Level: (low/med) MED Date Received: 1/4/2006 % Moisture: not dec. 11.21 Date Analyzed: 1/17/2006 GC Column: RTX502. ID: 0.25 (mm) Dilution Factor: 1.0 Soil Extract Volume: 25000 Soil Aliquot Volume: 125 (uL)

CAS NO.	COMPOUND (ug/L or ug/l	(g) <u>UG/KG</u>	Q
1330-20-7	m+p-Xylenes	700	
95-47-6	o-Xylene	100	J
100-42-5	Styrene	110	U
75-25-2	Bromoform	110	U
79-34-5	1,1,2,2-Tetrachloroethane	110	Ū
541-73-1	1,3-Dichlorobenzene	110	U
106-46-7	1,4-Dichlorobenzene	110	U
95-50-1	1,2-Dichlorobenzene	110	Ü
91-20-3	Naphthalene	110	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

FIEL	DID.
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Lab Name:	FMETL	n'		NJDEP#: 13461	906AE	
Project:	063488	0634880 Case No.: 60007		Location: 906A SD	G No.: UST	
Matrix: (soil/	water)	SOIL		Lab Sample ID:	6000703	
Sample wt/v	ol:	10.2	(g/ml) G	Lab File ID:	VB021395.D	
Level: (low/r	ned)	MED		Date Received:	1/4/2006	
% Moisture:	not dec.	11.21		Date Analyzed:	1/17/2006	
GC Column:	RTX5	02. ID:	<u>0.25</u> (mm)	Dilution Factor:	1.0	
Soil Extract \	Volume:	25000	(uL)	Soil Aliquot Volum	ne: 125	(uL

CONCENTRATION UNITS:

(ug/L or ug/Kg)

UG/KG

Number TICs found:

10

		1		
CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	28.13	6000	J
2. 000095-36-3	1,2,4-Trimethylbenzene	29.36	13000	JN
3. 000493-02-7	Naphthalene, decahydro-, trans-	30.36	9000	JN
<u>4. 00</u> 1074-43-7	Benzene, 1-methyl-3-propyl-	30.48	8200	JN
5. 001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	30.56	6100	JN
6. 000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	31.32	5100	JN
<u>7. 002958-76-1</u>	Naphthalene, decahydro-2-methyl	31.61	7800	JN
8. 002958-76-1	Naphthalene, decahydro-2-methyl	32.02	5400	JN
9. 000099-87-6	Benzene, 1-methyl-4-(1-methylet	32.23	5300	JN
10.	unknown	33.08	7200	J

SEMI-VOLATILE ORGANICS

Semi-Volatile Analysis Report

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

BNA11446.D

Sample Name

MB 01090601

Operator

Data File Name

Skelton

Misc Info

MB 01090601

Date Acquired 17-Jan-06 Sample Multiplier 1

					Regulatory Level			
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL	RL .	Qualifiers
110-86-1	Pyridine	1	2100 10 2220	not detected	NLE	1.13	10.00 ug/L	- Qualificity
62-75-9	N-nitroso-dimethylamine			not detected	20	0.60	10.00 ug/L	
62-53-3	Aniline			not detected	NLE	2.38	10.00 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.71	10.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.02	10.00 ug/L	
106-46-7	1,4-Dichlorobenzene	1		not detected	75	0.99	10.00 ug/L	1
100-51-6	Benzyl alcohol			not detected	NLE	0.66	10.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	10.00 ug/L	
39638-32-9	bis(2-chloroisopropyl)ether	1	····	not detected	300 ·	0.88	10.00 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.76	10.00 ug/L	
67-72-1	Hexachloroethane	<u> </u>		not detected	10	0.96	10.00 ug/L	
98-95-3	Nitrobenzene			not detected	10	0.86	10.00 ug/L	
78-59-1	Isophorone		····································	not detected	100	0.76	10.00 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00 ug/L	
120-82-1	1.2.4-Trichlorobenzene			not detected	9	0.89	10.00 ug/L	
91-20-3	Naphthalene			not detected	NLE	0.76	10.00 ug/L	
106-47-8	4-Chloroaniline	ŀ		not detected	NLE	1.37	10.00 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00 ug/L	
91-57-6	2-Methylnaphthalene	-	•	not detected	NLE	1.01	10.00 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	. 50	0.92	10.00 ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.72	10.00 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00 ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.78	10.00 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00 ug/L	
606-20-2	2,6-Dinitrotoluene	•		not detected	NLE	0.71	10.00 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00 ug/L	
83-32-9	Acenaphthene		<u></u>	not detected	400	0.73	10.00 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.81	10.00 ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.96	10.00 ug/L	
86-73-7	Fluorene			not detected	300	0.71	10.00 ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.73	10.00 ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.11	10.00 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.62	10.00 ug/L	
103-33-3	Azobenzene	1 1		not detected	NLE	0.72	10.00 ug/L	
101-55-3	4-Bromophenyl-phenylether	1		not detected	NLE	0.92	10.00 ug/L	
118-74-1	Hexachlorobenzene	1		not detected_	10	0.95	10.00 ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.81	10.00 ug/L	
120-12-7	Anthracene			not detected	2000	0.76	10.00 ug/L	
84-74-2	Di-n-butylphthalate	\bot		not detected	900	0.92	10.00 ug/L	
206-44-0	Fluoranthene	<u> </u>		not detected	300	0.82	10.00 ug/L	

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Semi-Volatile Analysis Report Page 2

Data File Name

BNA11446.D

Sample Name

MB 01090601

Operator

Skelton

Misc Info

MB 01090601

Date Acquired

17-Jan-06

Sample Multiplier

CAS#	Name	R.T. Re	sponse	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine			not detected	50	0.98	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.79	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.82	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.77	10.00	ug/L	<u> </u>
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.28	10.00	ug/L	<u> </u>
117-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.98	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	· 2	0.92	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.76	10,00	ug/L	
53-70-3	Dibenz[a,h]anthracene		:	not detected	20	0.76	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.80	10.00	ug/L	

^{*} Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

MDL= Method Detection Limit

NLE= No Limit Established

B= Compound in Related Blank

R.T.=Retention Time

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	FMETL		•	Lab Co	de <u>13461</u>		MB-0109	06-01	
Project:	06-3488	<u> 30 ·</u>	Case No.: 60007	Loca	tion: UST	s	SDG No.:		
Matrix: (soil/v	vater)	WATE	3		Lab Sample	D:	MB 0109060	1	
Sample wt/vo	ol:	1000	(g/ml) ML		Lab File ÎD:		BNA11446.D	1	
Level: (low/n	ned)	LOW	·	1	Date Recei	ved:	1/4/2006		
% Moisture:		(decanted: (Y/N)	<u>N</u>	Date Extrac	ted:	1/9/2006		
Concentrated	Extract	Volume:	1000 (uL)		Date Analyz	zed:	1/17/2006		
Injection Volu	ıme: <u>1.</u>	0(uL	.)	1	Dilution Fac	tor:	1.0		
GPC Cleanup	p: (Y/N)	N	pH:						
				CONCE	NTRATION	UNI	TS:		
Number TICs	found:	1		(ug/L or	ug/Kg)	UG/	<u>L</u>		
CAS NUME	BER	COMF	OUND NAME		RT .	ES	ST. CONC.	Q	
1.		unknov	n hydrocarbon		6.82		7	J	

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name Operator

BNA11451.D

Skelton

Sample Name

6000705

Date Acquired

17-Jan-06

Misc Info

906AC

Sample Multiplier 1

110-36-1 Pyridine	CA CH	N	D M	_	- N	Regulatory Level (ng/L)*				
	CAS#	Name	R.T.	Response	Result	,	MDL	RL	r	Qualifiers
11.44.4 bis(2-Chloroethyl)ether not detected 10 0.71 10.00 ug/L			_			NLE	1.13			<u> </u>
111-44-4 bis(2-Chleroethy)ether			-		not detected					
1.3-Dichlorobenzene not detected 600 1.02 10.00 ug/L					not detected		2.38			
106.46-7			_		not detected	10	0.71	10.00	ug/L	
100-51-6 Benzyl alcohol			· ·		not detected	600	1.02	10.00	ug/L	<u> </u>
12-Dichlorobenzene not detected 600 0.96 10.00 10.		1,4-Dichlorobenzene			not detected	75	0.99	10.00	ug/L	ļ
19638-32-9 bis(2-chloroisopropy)ether					not detected	NLE	0.66	10.00	ug/L	ļ
100 100	95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	10.00	up/L	
	39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.88	10.00	ug/L	<u> </u>
Nitrobenzene not detected 10 0.86 10.00 ug/L	621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.76	10.00	ug/L	
11-91-1 150phorone 150phorone 10.00	67-72-1	Hexachloroethane	<u> </u>		not detected	10	0.96	10.00	ug/L	
111-91-1 bis(2-Chloroethoxy)methane not detected NIE 0.79 10.00 ug/L	98-95-3	Nitrobenzene			not detected	10	0.86	10.00	ug/L	
120-82-1 1,2,4-Trichlorobenzene 13.45 6130404 95.10 ug/L NLE 0.76 10.00 ug/L 106-47-8 4-Chloroaniline 13.45 6130404 95.10 ug/L NLE 0.76 10.00 ug/L 106-47-8 4-Chloroaniline 15.13 10.00 ug/L 106-47-8 4-Chloroaniline 15.13 10.00 ug/L 106-47-8 4-Chloroaniline 10.00 ug/L 107-47-4 Hexachlorocyclopentadiene 15.13 7596989 181.73 ug/L NLE 1.01 10.00 ug/L 107-47-4 Hexachlorocyclopentadiene 15.13 7596989 181.73 ug/L NLE 1.01 10.00 ug/L 107-47-4 Hexachlorocyclopentadiene 10.00 ug/L 10.00 ug/L 107-47-4 Hexachlorocyclopentadiene 10.00 ug/L 10.00 ug/L 107-47-4 Hexachlorocyclopentadiene 10.00 ug/L 10.00 ug/L 108-4-4 2-Nitroaniline 10.00 ug/L 10.00 ug/L 109-18-7 2-Chloroanphthalene 10.00 ug/L 10.00 ug/L 109-18-7 2-Chloroanphthalene 10.00 ug/L 109-18-8 Acenaphthylene 10.00 ug/L 10.00 ug/L 109-19-2 3-Nitroaniline 10.00 ug/L 10.00 ug/L 109-19-2 3-Nitroaniline 10.00 ug/L 10.00 ug/L 109-19-2 3-Nitroaniline 10.00 ug/L 10.00 ug/L 109-10-2 3-Nitroaniline 10.00 ug/L 10.00 ug/L 109-10-3 4-Chlorophenyl-phenylether 10.00 ug/L 10.00 ug/L 109-10-4 4-Nitroaniline 10.00 ug/L 10.00 ug/L 109-10-6 4-Nitroaniline 10.00 ug/L 10.00 ug/L 10.00 ug/L 109-10-6 10.00 ug/L 10.0	78-59-1	Isophorone	<u> </u>		not detected	100	0.76	10.00	ug/L	
13.45 6130404 95.10 ug/L NLE 0.76 10.00 ug/L 106-47-8 4-Chloroaniline not detected NLE 1.37 10.00 ug/L 106-47-8 4-Chloroaniline not detected NLE 1.37 10.00 ug/L 107-47-6 2-Methylnaphthalaten 15.13 7596989 181.73 ug/L NLE 1.01 10.00 ug/L 17-47-4 Hexachlorocyclopentadiene not detected 50 0.92 10.00 ug/L 19-158-7 2-Chloronaphthalane not detected NLE 0.72 10.00 ug/L 188-74 2-Nitroaniline not detected NLE 0.77 10.00 ug/L 131-11-3 Dimethylphthalate not detected NLE 0.77 10.00 ug/L 131-11-3 Dimethylphthalate not detected NLE 0.67 10.00 ug/L 208-96-8 Acenaphthylene not detected NLE 0.67 10.00 ug/L 208-96-8 Acenaphthylene not detected NLE 0.71 10.00 ug/L 209-09-2 3-Nitroaniline not detected NLE 0.71 10.00 ug/L 23-32-9 Acenaphthene not detected NLE 1.18 10.00 ug/L 23-32-9 Acenaphthene not detected NLE 0.73 10.00 ug/L 21-14-2 2,4-Dinitrotoluene not detected NLE 0.69 10.00 ug/L 24-66-2 Diethylphthalate not detected 10 0.81 10.00 ug/L 24-66-2 Diethylphthalate not detected NLE 0.73 10.00 ug/L 24-66-2 Diethy	111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00	ug/L	
106-47-8	120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.89	10.00	ug/L	
R7-68-3 Hexachlorobutadiene not detected 1 0.99 10.00 ug/L	91-20-3	Naphthalene	13.45	6130404	95.10 ug/L	NLE	0.76	10.00	ug/L	
15.76 2-Methylnaphthalene 15.13 7596989 181.73 ug/L NLE 1.01 10.00 ug/L 177-47-4 Hexachlorocyclopentadiene not detected 50 0.92 10.00 ug/L 10.00	106-47-8	4-Chloroaniline			not detected	NLE	1.37	10.00	ug/L	
T7-47-4 Hexachlorocyclopentadiene not detected 50 0.92 10.00 ug/L	87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00	ug/L	
91-58-7 2-Chloronaphthalene not detected NLE 0.72 10.00 ug/L	91-57-6	2-Methylnaphthalene	15.13	7596989	181.73 ug/L	NLE	1.01	10.00	ug/L	В
88-74-4 2-Nitroaniline not detected NLE 0.77 10.00 ug/L 131-11-3 Dimethylphthalate not detected 7000 0.78 10.00 ug/L 208-96-8 Acenaphthylene not detected NLE 0.67 10.00 ug/L 606-20-2 2,6-Dinitrotoluene not detected NLE 0.71 10.00 ug/L 99-09-2 3-Nitroaniline not detected NLE 1.18 10.00 ug/L 83-32-9 Acenaphthene not detected NLE 0.69 10.00 ug/L 132-64-9 Dibenzofuran not detected NLE 0.69 10.00 ug/L 121-14-2 2,4-Dinitrotoluene not detected 10 0.81 10.00 ug/L 84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected NLE 0.73 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not	77-47-4	Hexachlorocyclopentadiene			not detected	50	0.92	10.00	ug/L	
131-11-3 Dimethylphthalate	91-58-7	2-Chloronaphthalene			not detected	NLE	0.72	10.00	ug/L	
208-96-8 Acenaphthylene not detected NLE 0.67 10.00 ug/L	88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00	ug/L	
100 100	131-11-3	Dimethylphthalate			not detected	7000	0.78	10.00	ug/L	
99-09-2 3-Nitroaniline not detected NLE 1.18 10.00 ug/L	208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00	ug/L	
83-32-9 Acenaphthene not detected 400 0.73 10.00 ug/L 132-64-9 Dibenzofuran not detected NLE 0.69 10.00 ug/L 121-14-2 2,4-Dinitrotoluene not detected 10 0.81 10.00 ug/L 84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected 300 0.71 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not detected NLE 0.73 10.00 ug/L 100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected NLE 0.72 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Anthracene not detected 2000 0.76 10.00 ug/L 100-01-0 not detected 2000 0.76 10.00 100-01-0	606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.71	10.00	ug/L	
132-64-9 Dibenzofuran not detected NLE 0.69 10.00 ug/L 121-14-2 2,4-Dinitrotoluene not detected 10 0.81 10.00 ug/L 84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected 300 0.71 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not detected NLE 0.73 10.00 ug/L 100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected NLE 0.72 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLE 0.81 10.00 ug/L 120-12-7 Anthracene not detected 2000 0.76 10.00 ug/L 100-12-7 Natracene no	99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00	ug/L	
121-14-2 2,4-Dinitrotoluene not detected 10 0.81 10.00 ug/L 84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected 300 0.71 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not detected NLE 0.73 10.00 ug/L 100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected 20 0.62 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLE 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L 100-12-7 Number	83-32-9	Acenaphthene			not detected	400	0.73	10.00	ug/L	
121-14-2 2,4-Dinitrotoluene not detected 10 0.81 10.00 ug/L 84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected 300 0.71 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not detected NLE 0.73 10.00 ug/L 100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected 20 0.62 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L <t< td=""><td>132-64-9</td><td>Dibenzofuran</td><td></td><td></td><td>not detected</td><td>NLE</td><td>0.69</td><td>10.00</td><td>ug/L</td><td></td></t<>	132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00	ug/L	
84-66-2 Diethylphthalate not detected 5000 0.96 10.00 ug/L 86-73-7 Fluorene not detected 300 0.71 10.00 ug/L 7005-72-3 4-Chlorophenyl-phenylether not detected NLE 0.73 10.00 ug/L 100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected 20 0.62 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L	121-14-2	2,4-Dinitrotoluene		-	not detected	10	0.81			
100-01-6	84-66-2	Diethylphthalate			not detected	1				
Tour	86-73-7	···)				300	0.71			
100-01-6 4-Nitroaniline not detected NLE 1.11 10.00 ug/L 86-30-6 n-Nitrosodiphenylamine not detected 20 0.62 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L	7005-72-3				•	1				
86-30-6 n-Nitrosodiphenylamine not detected 20 0.62 10.00 ug/L 103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L	100-01-6	T "								
103-33-3 Azobenzene not detected NLE 0.72 10.00 ug/L 101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLE 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L		n-Nitrosodiphenylamine				T				
101-55-3 4-Bromophenyl-phenylether not detected NLE 0.92 10.00 ug/L 118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Antbracene not detected 2000 0.76 10.00 ug/L										
118-74-1 Hexachlorobenzene not detected 10 0.95 10.00 ug/L 85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLE 0.81 10.00 ug/L 120-12-7 Anthracene not detected 2000 0.76 10.00 ug/L	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
85-01-8 Phenanthrene 21.38 20596979 233.39 ug/L NLB 0.81 10.00 ug/L 120-12-7 Antbracene 10.00 ug/L 10.00 ug/L						1			1	
120-12-7 Anthracene not detected 2000 0.76 10.00 ug/L			21 38	20596079					1	R
			21.20	20070717	•	1				
64-74-7. THE PORTY IN THE PROPERTY OF THE PARTY OF THE PA	84-74-2	Di-n-butylphthalate	1		not detected	900	0.70		1	† ·
84-74-2 Di-n-butylphthalate not detected 900 0.92 10.00 ug/L 206-44-0 Fluoranthene not detected 300 0.82 10.00 ug/L					•					

Semi-Volatile Analysis Report Page 2

Data File Name

BNA11451.D

Operator

Skelton

Date Acquired 17-Jan-06

Sample Name

6000705

Misc Info

906AC

Sample Multiplier 1

					Regulatory Level			
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL	RL	Qualifiers
92-87 - 5	Benzidine			not detected	50	0.98	10.00	ug/L
129-00-0	Pyrene	24.71	4308044	77.93 ug/L	200	0.79	10.00	
85-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00	1
56-55-3	Benzo[a]anthracene			not detected	10	0.82	10.00	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	
218-01-9	Chrysene			not detected	20	0.77	10.00	
117-81-7	bis(2-Ethylhexyl)phthalate	27.71	107539	3.15 ug/L	30	1.28	10.00	***
117-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.98	10.00	- 1
207-08-9	Benzo[k]fluoranthene			not detected	2	0.92	10.00	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.76	10.00	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.76	10.00	
191-24-2	Benzo[g,h,i]perylene			not detected	NLB	0.80	10.00	

^{*} Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

B= Compound in Related Blank

MDL= Method Detection Limit

NLE= No Limit Established

R.T.=Retention Time

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

Page 2 of 2

Semi-Volatile Analysis Report

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

Data File Name

BNA11466.D

Sample Name

6000705

Operator

Skelton

Misc Info

906AC 1:5 Dilution

Date Acquired

18-Jan-06

Sample Multiplier

Regulatory

					Regulatory Level				
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL	RL		Qualifiers
110-86-1	Pyridine			not detected	NLE	5.65	50.00	ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	20	3.00	50.00	ug/L	
62-53-3	Aniline			not detected	NLE	11.90	50.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	3.55	50.00	ug/L	
541-73-1	1,3-Dichlorobenzene	·		not detected	600	5.10	50.00	ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	4.95	50.00	ug/L	
100-51-6	Benzyl alcohol			not detected	NLE	3.30	50.00	ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	4.80	50.00	ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	4.40	50.00	ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	3.80	50.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	4.80	50.00		
98-95-3	Nitrobenzene			not detected	10	4.30	50.00	ug/L	
78-59-1	Isophorone			not detected	100	3.80	50.00	ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	3,95	50.00	ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	4.45	50.00	ug/L	
91-20-3	Naphthalene	13.34	668694	59.03 ug/L	NLE	3.80	50.00		D
106-47-8	4-Chloroaniline			not detected	NLE	6.85	50.00	ug/L	
87-68-3	Hexachlorobutadiene		-	not detected	1	4.95	50.00		
91-57-6	2-Methylnaphthalene	15.02	1244682	169.44 ug/L	NLE	5.05	50.00		D
77-47-4	Hexachlorocyclopentadiene			not detected	50	4.60	50.00		
91-58-7	2-Chloronaphthalene		-	not detected	NLE	3.60	50.00	ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	3.85	50.00	ug/L	
131-11-3	Dimethylphthalate			not detected	7000	3.90	50.00	ug/L	
208-96-8	Acenaphthylene			not detected	NLE	3.35	50.00	ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	3.55	50.00	ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	5.90	50.00	ug/L	
83-32-9	Acenaphthene			not detected	400	3.65	50.00	ug/L	
132-64-9	Dibenzofuran			not detected	NLE	3.45	50.00	ug/L	<u> </u>
121-14-2	2,4-Dinitrotoluene			not detected	10	4.05	50.00	ug/L	
84-66-2	Diethylphthalate			not detected	5000	4.80	50.00	ug/L	
86-73-7	Fluorene			not detected	300	3.55	50.00	ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	3.65	50.00	ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	5.55	50.00	ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	3.10	50.00	ug/L	
103-33-3	Azobenzene			not detected	NLE	3.60	50.00	ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	4.60	50.00	ug/L	
118-74-1	Hexachlorobenzene	1		not detected	10	4.75	50.00	ug/L	
85-01-8	Phenauthrene	21.20	3207875	189.24 ug/L	NLE	4.05	50.00	ug/L	D
120-12-7	Anthracene			not detected	2000	3.80	50.00		
84-74-2	Di-n-butylphthalate	· .		not detected	900	4.60	50.00	ug/L	
206-44-0	Fluoranthene			not detected	300	4.10	50.00		

Page 1 of 2

Semi-Volatile Analysis Report Page 2

Data File Name

Date Acquired

Operator

BNA11466.D

Skelton 18-Jan-06 Sample Name

6000705

Misc Info

906AC 1:5 Dilution

Sample Multiplier

Regulatory

CAS#	Name	R.T.	Response	Result	Level (ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine	_		not detected	50	4.90	50.00	ug/L	
129-00-0	Pyrene	24.59	466137	41.04 ug/L	200	3.95	50.00		D
85-68-7	Butylbenzylphthalate			not detected	100	4.30	50.00		
56-55-3	Benzo[a]anthracene			not detected	10	4.10	50.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	6.55	50.00		
218-01-9	Chrysene			not detected	20	3.85	50.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate	_		not detected	30	6.40	50.00		
117-84-0	Di-n-octylphthalate			not detected	100	5.10	50.00		
205-99-2	Benzo[b]fluoranthene			not detected	10	4.90	50.00		
207-08-9	Benzo[k]fluoranthene			not detected	2	4.60	50.00		1***
50-32-8	Benzo[a]pyrene			not detected	20	3.55	50.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	3.80	50.00		
53-70-3	Dibenz[a,h]anthracene			not detected	20	3.80	50.00		
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	4.00	50.00		

^{*} Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

B= Compound in Related Blank

MDL= Method Detection Limit

NLE= No Limit Established

R.T.=Retention Time

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

Page 2 of 2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	FMETL			Lab Cod	le 13461	906AC
Project:	06-3488	0	ase No.: 60007	Locati	ion: UST S	DG No.:
Matrix: (soil/v	vater)	WATER	<u></u>	L	ab Sample ID:	6000705
Sample wt/vo	ol:	1000	(g/ml) ML	L	ab File ID:	BNA11451.D
Level: (low/n	ned)	LOW			Date Received:	1/4/2006
% Moisture:		de	ecanted: (Y/N)	<u>N</u> [Date Extracted:	1/9/2006
Concentrated	d Extract '	Volume:	1000 (uL)		Date Analyzed:	1/17/2006
Injection Volu	ıme: <u>1.0</u>	(uL)			Dilution Factor:	1.0
GPC Cleanur	p: (Y/N)	N	_ pH:		i e	

Number TICs found:	15 (ug/L or	ug/Kg)	UG/L	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	unknown hydrocarbon	7.20	6	J
2.	unknown hydrocarbon	7.53	6	J
3. 003728-57-2	Cyclopentane, 1-methyl-2-propyl-	7.86	5	JN
4.	unknown hydrocarbon	8.34	10	J
5.	unknown hydrocarbon	8.61	12	J
6.	unknown hydrocarbon	8.82	38	J
7.	unknown hydrocarbon	9.36	23	J
8.	unknown hydrocarbon	9.54	12	J
9. 004291-79-6	Cyclohexane, 1-methyl-2-propyl-	9.84	16	JN
10. 000526-73-8	Benzene, 1,2,3-trimethyl-	10.01	9	JN
	unknown hydrocarbon	10.30	5	J
12. 017302-28-2	Nonane, 2,6-dimethyl-	10.49	40	JN
13	unknown hydrocarbon	10.78	11	J
14.	unknown hydrocarbon	10.99	12	J
15	unknown hydrocarbon	12.49	40	J

TPHC

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

Client:

U.S. Army

DPW. SELFM-PW-EV

Project #: Location: 60007

Bldg. 173

UST Reg. #:

906A

Ft. Monmouth, NJ 07703

Analysis:

OQA-QAM-025

Date Received:

03-Jan-06

Matrix:

Soil

Date Extracted:

06-Jan-06

Inst. ID.:

GC TPHC INST. #1

Extraction Method:

Shake

Column Type:

Analysis Complete:

07-Jan-06

RTX-5, 0.32mm ID, 30M

Analyst:

P.Skelton

Injection Volume:

Lab ID	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	RL	TPHC Result (mg/kg)
6000701	906AC '	1.00	15.78	85.66	71	370	693.23
6000702	906AC	1.00	15.26	94.06	67	348	5634.52
6000703	906AB	1.00	15.43	88.79	70	365	6699.15
6000704	906AW	1.00	15.06	86.57	74	384	195.12
		 		,			
							
					`		
METHOD BLANK	MB-01060601	1.00	15.00	100.00	64	333	ND

ND = Not Detected

MDL = Method Detection Limit

RL = Reporting Limits

Note: The TPHC result between the MDL and RL are considered an estimated value

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

I.	& date of report submitted.	
2.	Table of Contents submitted.	
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted.	
4.	Document paginated and legible.	<u>/</u>
5.	Chain of Custody submitted.	<u>/</u>
6.	Samples submitted to lab within 48 hours of sample collection.	
7.	Methodology Summary submitted.	
8.	Laboratory Chronicle and Holding Time Check submitted.	
9.	Results submitted on a dry weight basis.	
10.	Method Detection Limits submitted.	<u> </u>
11.	Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP.	<u>/</u>
	Laboratory Manager or Environmental Consultant's Signature Date: 1 / 27 / 66	

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

Laboratory Certification # 13461

Methods for further guidance.

Laboratory Authentication Statement

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

Daniel K. Wright Laboratory Manager

ATTACHMENT E

UST 910 File Review and Analyses



UNDERGROUND STORAGE TANK FILE REVIEW FORT MONMOUTH BRAC 05 FACILITY OCEANPORT, NEW JERSEY

Date: <i>March 10, 2015</i>	Review Performed By: <i>Kent Friesen, Parsons</i>
Site ID: Bldg. 910	Registration ID: 81533-148
Recommended Status of Site: (Case Closed (no change)
UST Probability (from May 2014	4 "Addendum 1 ECP UHOT Report"): <i>NFA</i>
Based on the file review, were t	here indications of a contaminant release? [] Yes [X] No
NJDEP Release No. or DICAR (If	applicable): <u>None</u>
Did NJDEP approve No Further	Action (NFA) for this site? [] Yes [X] No [] Not Applicable
Tank Description: [X] Steel [] Fiberglass Size: <u>1000 gal.</u> Contents: <u>No. 2 Fuel Oil</u>
[] Residential [X] Com	mercial/Industrial
Tank Removed? [X]Yes [] I	No If "yes," removal date: <u>June 26, 1990</u>
Were closure soil samples taker	n? [] Yes [X] No Analyses:
Comparison criteria:	
Were closure soil sample result	s less than comparison criteria? [] Yes [] No
	Brief Narrative
	as located adjacent to Building 910. The tank was removed in were not collected because contamination was not observed, rocedure at the time.
petroleum contamination (anal for total petroleum hydrocarb organic compounds (VOCs) an results were non-detected for of 5,100 mg/kg for TPH. The V	performed using a Geoprobe in 2006 to assess the site for yses attached). Three soil samples were collected from the site ons (TPH) analysis, and one groundwater sample for volatile d semivolatile organic compounds (SVOCs) analysis. The soil TPH, which was less than the current TPH remediation criterion OC chloroform was detected in groundwater at a concentration Ground Water Quality Criteria. No SVOCs were detected in
In conclusion, the analytical res	ults support the UST Case Status of "Case Closed."
Recommendations (if any):R	Request NFA from NJDEP
Signed: Junt 1.	9 min

Kent A. Friesen, Parsons

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732) 532-4359 FAX: (732) 532-6263

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

CERTIFICATIONS: NJDEP #13461, NYSDOH #11699



ANALYTICAL DATA REPORT Fort Monmouth Environmental Laboratory ENVIRONMENTAL DIVISION Fort Monmouth, New Jersey

PROJECT: BLDG. 910

Bldg. 910

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
910 C 6.5-7.0°	6001001	Soil	05-Jan-06 10:39	01/05/06
910 E 6.5-7.0°	6001002	Soil	05-Jan-06 11:05	01/05/06
910 W 6.5-7.0°	6001003	Soil	05-Jan-06 11:40	01/05/06
Duplicate	6001004	Soil	05-Jan-06 11:40	01/05/06
910 C GW	6001005	Aqueous	05-Jan-06 12:31	01/05/06
Trip Blank	6001006	Aqueous	05-Jan-06	01/05/06
Trip Blank	6001007	Methanol	05-Jan-06	01/05/06

ANALYSIS:

FORT MONMOUTH ENVIRONMENTAL LAB VOA+15, BN+15, TPHC, % SOLIDS

ENCLOSURE: CHAIN OF CUSTODY RESULTS

(QC and raw data not included for brevity)

Daniel Wright/Date
Laboratory Director

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CHAIN OF CUSTODY



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: John	McCarthy	Project No:	06-34	880	l	Analysis Parameters				Comments:				
Phone: X2 6224 Location: 910							1.				, j			
()DERA ()OMA	()Other:	(For	ner US	<u>(75</u>	•		2) }						No. State Control of the Control of
Samplers Name / Co	mpany: George Boy	CL /TVS		Sample	#	PH	10+10	\supset						
LIMS/Work Order#		Date	Time	Туре	bottles		λ(BN+15						Remarks / Preservation Method
	910C 6.5.7.0	1/5/06	1039	Su:	2	Χ				·				4402
	910 E 6,5-70	*	11.05	Soil	2	X								4403
	910 W 6,5-7,0		11 40	Soil	2	X								4404
04	Dupe		1140	Soil	2	×								4405
05	910c-GW		1231	AQ	4		X	X			_			
00	TRip			AQ			X							
a 07	TRIP			Seil			X		<u> </u>					4401
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Refinquished by (signatu		Received by		11.0		quished	by (sig	nature)	:	Date	Time:	Recei	ved by	(signature):
Meorge Boy				lun									· · · · · · · · · · · · · · · · · · ·	
हे келицивной by (віднаше). — Date Ime: Received by (я			(signature)		Relind	quished	by (sig	mature)	:	Date	/Time:	Recei	ved by	(signature):
Report Type: ()Full, (1)	Reduced, ()Standard, ()Scre	en / non-certifi	ed, (_)EDD			Rema	rks:							
Turnaround time: (1)Stan	ndard 3 wks, ()RushDays,	(_)ASAP Ver	balHrs.					·			•			

SAMPLE RECEIPT FORM

Date Received:	5-04	Work Order	ID#: <u> </u>	00010				
Site/Proj. Name: Bld	4 910/451	Cooler Temp	(°Ç):	3,0°C				
Received By: (Print name)	Lengua .	Sign:	lel	yena				
(1),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Check the appr	ropriate box	_(/				
1. Did the samples com			☑ yes	□ no □ n/a				
2. Were samples rec'd i			包 yes	□ no				
3. Was the chain of cus	tody filled out correct	ty and legibly?		☐ no				
4. Was the chain of cus	tody signed in the an	propriate place?	☑ ves	□ no				
5. Did the labels agree			☑ yes	□ no				
6. Were the correct con			☑ yes	□ no				
7. Was a sufficient amo			Ø yes	□ no				
8. Were air bubbles pre			□ yes	🗹 no 🗆 n/a 🔻				
9. Were samples receive		,	2 yes	□ no				
10. Were analyze-imme	diately tests perform	within 15 minutes	□ yesl	□ no □ n/a				
10; Well allary 20 minus	,							
Fill out the following table for each sample bottle								
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рH	Preservative				
Lims ID pH	Preservative	Sample ID	рH	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	pH	Preservative				
Lims ID pH	Preservative	Sample ID	рН	Preservative				
Lims ID pH	Preservative	Sample ID	pH	Preservative				
Lims ID pH	Preservative	Sample ID	pH	Preservative				
	Preservative	Sample ID	pH	Preservative				
Lims ID pH	Preservative	Sample ID	pH	Preservative				
	Preservative	Sample ID	PH	Preservative				

Former UST 910 Sample Location GPS Positions

US State Plane 1983 New Jersey (NY East) 2900 NAD 1983 (Conus) Geoid 96 (Conus)

(In US Survey Feet)

Position ·	Northing (Y Coord.)	Easting (X Coord.)		
910 E	538995.398	621019.991		
910 C	539001.664	621014.762		
910 W	539004.425	621007.821		

METHOD SUMMARY

Methodology Summary

EPA Method 624 Gas Chromatographic Determination of Volatiles in Water

Surrogates and internal standards are added to a 5-ml aliquot of sample. The sample is then purged and desorbed into a GC/MS system. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Volatiles are identified and quantitated.

EPA SW-846 Method 8260 Gas Chromatographic Determination of Volatiles in Methanol

A 10-gram volume of soil is combined with 25-ml of Methanol and surrogates in the field. Internal standards are added and the sample is placed on a purge and trap concentrator. The sample as purged and desorbed into a GC/MS system. Volatiles are identified and quantitated. The final concentration is calculated using soil weight, percent moisture and concentration.

EPA Method 625 Gas Chromatographic Determination of Semi-volatiles in Water

Surrogates are added to a measured volume of sample, usually 1 liter, at a specified pH. The sample is serially extracted with Methylene Chloride using a separatory funnel. The extract is concentrated and internal standards are added. The sample is injected into a GC/MS system. Semi-volatiles are identified and quantitated.

NJDEP Method OQA-QAM-025 10/97 Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

Fifteen grams (15g) of soil is added to a 125-ml acid cleaned and solvent rinsed capped Erlenmeyer flask. 15g anhydrous Sodium Sulfate is added to dry the sample. Surrogate standard spiking solution is then added to the flask.

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

The extract is then injected directly into a GC-FID for analysis. The sample is analyzed for Petroleum Hydrocarbons covering a range of C8-C42, including Pristane and Phytane. Total Petroleum Hydrocarbon concentration is determined by integrating between 5 minutes and 22 minutes. The baseline is established by starting the integration after the end of the solvent peak and stopping after the last peak. The final concentration of Total Petroleum Hydrocarbons is calculated using percent moisture, sample weight and concentration.

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID: 60010

Site: UST

Bldg. 910

	Date	Hold Time	
Date Sampled	01/05/06	NA	
Receipt/Refrigeration	01/05/06	NA	
Extractions			
1. BN 2. TPHC	01/09/06 01/11/06	7 days 14 days	
Analyses			
1. VOA 2. BN 3. TPHC	01/11,12/06 01/17/06 01/12/06	14 days 40 days 40 days	

CONFORMANCE/ NONCONFORMANCE SUMMARY

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		•	Indicate Yes, No, N/A
1.	Chromatograms labeled (Field samples and		yes
2.	Retention times for chro	omatograms provided	yes_
3.	GC/MS Tune Specifica	tions	·
	a. E	BFB Meet Criteria	yes
	b . П	DFTPP Meet Criteria	<u>Yes</u>
4.	.	ncy – Performed every 24 hours for 600	
	series and 12 hours for	8000 series	yes
5.	analysis and continuing	nitial Calibration performed before sample calibration performed within 24 hours of series and 12 hours for 8000 series	yes
6.	GC/MS Calibration req	nirements	V
		Calibration Check Compounds Meet Criteria ystem Performance Check Compounds Meet Criteria	yes yes
7.	Blank Contamination –	If yes, List compounds and concentrations in each blank:	NO
	a. V	OA Fraction	
	b. B	/N Fraction	
	c. A	cid Fraction	
8.	Surrogate Recoveries M	leet Criteria	<u>NO</u>
	If not met, list those outside the acceptal	e compounds and their recoveries, which fall ble range:	
	a. V	OA Fraction	
•	b. B	N Fraction Texpheny 440/6	
	c. A	cid Fraction	
	If not met, were the as "estimated"?	calculations checked and the results qualified	yes
9.		ike Duplicate Recoveries Meet Criteria mpounds and their recoveries, which fall ange)	NO
	a. V	OA Fraction Naphthalene ms+msD low	
	b. B	IN Fraction Benzidine mad law RPD high	
	c. A	cid Fraction	

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)

	Indicate Yes, No, N/A
 Internal Standard Area/Retention Time Shift Meet Criteria (If not met, list those compounds, which fall outside the acceptable ra 	nnge)
a. VOA Fraction	
b, B/N Flaction	
c. Acid Fraction	
. Extraction Holding Time Met	<u>yes</u>
If not met, list the number of days exceeded for each sample:	
2. Analysis Holding Time Met	yes
If not met, list the number of days exceeded for each sample:	
dditional Comments:	
	•
aboratory Manager: Date: 1-77	-06

TPHC CONFORMANCE/NON-CONFORMANCE SUMMARY REPORT

		Indicate Yes, No, N/A
1.	Method Detection Limits Provided	<u> 4es</u>
2.	Method Blank Contamination – If yes, list the sample and the corresponding concentrations in each blank	<u> </u>
3.	Matrix Spike Results Summary Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)	yes_
4.	Duplicate Results Summary Meet Criteria	405
5,	IR Spectra submitted for standards, blanks and samples	NA_
5.	Chromatograms submitted for standards, blanks and samples if GC fingerprinting was conducted	Yes
7.	Analysis holding time met (If not met, list number of days exceeded for each sample)	<u> </u>
Addit	ional comments:	
Labo	ratory Manager: Date: 1-27-06	

VOLATILE ORGANICS (AQUEOUS)

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY NJDEP CERTIFICATION # 13461

Definition of Qualifiers

- U: The compound was analyzed for but not detected.
- B: Indicates that the compound was found in the associated method blank as well as in the sample.
- J: Indicates an estimated value. This flag is used:
 - (1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.
 - (2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.
- D: This flag is used to identify all compounds (target or TIC) that required a dilution.
- E: Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.
- N: This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

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

·Data File Operator

VB021318.D

Skelton

Date Acquired 11 Jan 2006 8:48 pm Sample Name Field ID

MB 11Jan2006 MB 11Jan2006

Sample Multiplier

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	5	1.23 u <i>g/</i> L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether		Ï	not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane		-	not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1.1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone		<u> </u>	not detected	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1.1-Dichloroethane	• • • • • • • • • • • • • • • • • • • •	 	not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4			·	not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	Vinyl Acetate			not detected	300	0.26 ug/L	2.00 ug/L	· ·
70 35 5	2-Butanone			not detected	70	0.20 ug/L	2.00 ug/L	
	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	30	0.20 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	1	0.24 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	2	0.24 ug/L 0.23 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected		0.26 ug/L	2.00 ug/L	
79-01-6	Trichloroethene				1		2.00 ug/L 2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L		
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether		ļ <u> </u>	not detected	nlê	0.23 ug/L	2.00 ug/L	\vdash
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	\vdash
10061-02-6	trans-1,3-Dichloropropene		ļ 	not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	. 0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	-
591-78-6	2-Hexanone		<u> </u>	not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	<u> </u>
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	• • • • • • • • • • • • • • • • • • • •
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
<u> </u>	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	<u> </u>
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene		l	not detected	600	0.45 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

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

R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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

Lab Name:	FMETL			NJDEP#	: 13461		MB 11Ja	n2006
Project:	063488	0 Ca	se No.: <u>60010</u>	Locati	on: <u>910</u>	SD	G No.: US	Γ
Matrix: (soil/	water)	WATER	_	Ĺ	ab Sample	e ID: <u>N</u>	//B 11Jan20	06
Sample wt/ve	ol:	5.0	(g/ml) ML	L	ab File ID:		/B021318.D	
Level: (low/r	ned)	LOW	_		ate Recei	ved: <u>1</u>	/4/2006	
% Moisture:	not dec.				ate Analyz	ed: 1	/11/2006	
GC Column:	RTX5	02. ID: <u>0.</u>	25 (mm)	ם	ilution Fac	tor: <u>1</u>	.0	
Soil Extract \	Volume:	•	_ (uL)	5	Soil Aliquot	Volum	e:	(uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L								
CAS NO.		COMPOL	IND NAME		RT	EST	CONC.	Q
1. 00007	9-20-9	Acetic acid	l, methyl ester		12.47		4	JN

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

Data File

VB021324.D

Operator Date Acquired Skelton

12 Jan 2006 12:54 am

Sample Name

6001006 Trip Blank

Field ID Sample Multiplier

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane	,,		not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	6000	0.36 ug/L	2.00 ug/L	T
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	001	0.24 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane	÷		not detected	50	0.24 ug/L	2.00 ug/L	1
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	1
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	1
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	1
67-66-3	Chleroform			not detected	70	0.22 ug/L	2.00 ug/L	1
71-55-6	1,1,1-Trichloroethane			not detected	30	0.20 ug/L	2.00 ug/L	1
56-23-5	Carbon Tetrachloride			not detected	1	0.24 ug/L	2.00 ug/L	<u> </u>
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene		İ	not detected	1 1	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected		0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	†
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.23 ug/L	2.00 ug/L	1
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	†
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	1
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1.1.2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1 1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibremochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	<u> </u>
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene		1	not detected	nle	0.43 ag/L 0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	1
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene		 	not detected	600	0.45 ug/L 0.36 ug/L	2.00 ug/L	-
106-46-7	1.4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	$\overline{}$
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	-

^{*}Results between MDL and RL are estimated values

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

R.L. = Reporting Limit

^{*}Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

F	ΙE) [D:
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Lab Name:	FMETL			NJDEP	#: 13461		Trip BI	ank		
Project:	063488	0 Ca	se No.: 6000	6 Locat	tion: 637	SD	G No.: US	Γ		
Matrix: (soil/	water)	WATER	_	I	Lab Sample	D: <u>6</u>	001006			
Sample wt/v	Sample wt/vol: 5.0 (g/ml) N		(g/ml) ML		Lab File ID: _\					
Level: (low/r	Level: (low/med) LOW				Date Receiv	/ed: <u>1</u>	/4/2006			
· · · · · · · · · · · · · · · · · · ·						:ed: <u>1</u>	/12/2006			
GC Column: RTX502. ID: 0.25 (mm)					Dilution Fac	tor: <u>1</u>	.0			
Soil Extract \	Volume:		_ (uL)	;	Soil Aliquot Volume:					
Soil Extract Volume: (uL) Soil Aliquot Volume: (ull CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L UG/L										
CAS NO.		COMPOL	IND NAME		RT	EST	. CONC.	Q		
1. 000079-20-9 Acetic acid, methyl ester					12.47		4	JN		

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

Data File

VB021323.D

Operator Date Acquired Skelton

12 Jan 2006 12:13 am

Sample Name

6001005

Sample Multiplier

Field ID 910C 1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein		,	not detected	5	2.01 ug/L	5.00 ug/L	T
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether		<u>'</u>	not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane		-	not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	tile	0.29 ug/L	2.00 ug/L	
75-69-4	Trichloroffuoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone	•		not detected	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0,24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform	16.68	29813	0.42 ug/L	70	0.22 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride		-	not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene		•	not detected	1	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether	•	·	not detected	nle	0.23 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene	•		not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nie	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	<u> </u>
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	·
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ag/L	2.00 ug/L	ļ
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	1
79-34-5	1,1,2,2-Tetrachloroethane		***************************************	not detected	1 1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	igsquare
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	

^{*}Results between MDL and RL are estimated values

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

R.L. = Reporting Limit

^{*}Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

							910C-0	21/1/	
Lab Name:	FMETL			NJDEP#	t: <u>13461</u>		9100-0	VAR	
Project:	063488	0 Ca	se No.: <u>60006</u>	Locat	ion: <u>637</u>	_ SD	G No.: UST	-	
Matrix: (soil/	water)	WATER	_	L	ab Sample	ID: <u>6</u>	001005		
Sample wt/v	ol:	5.0	(g/ml) ML		.ab File ID:		/B021323.D		
Level: (low/r	med)	LOW	_	Γ	Date Receiv	/ed: <u>1</u>	/4/2006	·	
% Moisture:	not dec.			Γ	Date Analyz	ed: 1	/12/2006	<u></u>	
GC Column:	RTX5	02. ID: 0.2	25 (mm)	Γ	Dilution Fac	tor: <u>1</u>	.0		
Soil Extract	Volume:		(uL)	5	Soil Aliquot Volume:				
			C	CONCENTR	ATION UNI	TS:			
Number TIC	s found:	1	(ug/L or ug/K	g) <u>UG</u> ,	/L			
CAS NO.		COMPOL	IND NAME		RT	EST	. CONC.	Q	
	0.00.0		المعملات المعلمة		10.40		4	INI	

SEMI-VOLATILE ORGANICS

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name BNA11446.D

Sample Name

MB 01090601

Operator

Skelton

Misc Info

MB 01090601

Date Acquired

17-Jan-06

Sample Multiplier 1

Regulator
Lovel

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL .	Qualifiers
110-86-1	Pyridine	T	хсорольо	not detected	NLE	1.13	10.00 ug/L	
62-75-9	N-nitroso-dimethylamine		-	not detected	20	0.60	10.00 ug/L	
62-53-3	Aniline			not detected	NLE	2.38	10.00 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.71	10.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.02	10.00 ug/L	
106-46-7	1.4-Dichlorobenzene		_	not detected	75	0.99	·10.00 ug/L	
100-40-7	Benzyl alcohol	1		not detected	NLE	0.66	10.00 ug/L	
95-50-1	1,2-Dichlorobenzene	1		not detected	600	0.96	10.00 ug/L	
39638-32-9	bis(2-chloroisopropyl)ether	1		not detected	300	0.88	10.00 ug/L	
621-64-7	n-Nitroso-di-n-propylamine		***	not detected	20	0.76	10.00 ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	10.00 ug/L	
98-95-3	Nitrobenzene	-11		not detected	10	0.86	10.00 ug/L	
78-59-1	Isophorone	-i		not detected	100	0.76	10.00 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.89	10.00 ug/L	
91-20-3	Naphthalene			not detected	NLE	0.76	10.00 ug/L	
106-47-8	4-Chloroaniline		*	not detected	NLE	1.37	10.00 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00 ug/L	
91-57-6	2-Methylnaphthalene		<u>-</u>	not detected	NLE	1.01	10.00 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.92	10.00 ug/L	
91-58-7	2-Chloronaphthalene	1		not detected	NLE	0.72	10.00 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00 ug/L	
131-11-3	Dimethylphthalate	- ···		not detected	7000	0.78	10.00 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.71	10.00 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00 ug/L	
83-32-9	Acenaphthene			not detected	400	0.73	10.00 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00 ug/L	
121-14-2	2.4-Dinitrotoluene			not detected	10	0.81	10.00 ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.96	10.00 ug/L	
86-73-7	Fluorene		-	not detected	300	0.71	10.00 ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.73	10.00 ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	· 1.11	10.00 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.62	10.00 ug/L	
103-33-3	Azobenzene	1		not detected	NLE	0.72	10.00 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.92	10.00 ug/L	
118-74-1	Hexachlorobenzene	<u> </u>		not detected	10	0.95	10.00 ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.81	10.00 ug/L	
120-12-7	Anthracene			not detected	2000	0.76	10.00 ug/L	
84-74-2	Di-n-butylphthalate	 		not detected	900	0.92	10.00 ug/L	
206-44-0	Fluoranthene	~		not detected	300	0.82	10.00 ug/L	

Semi-Volatile Analysis Report Page 2

Data File Name

BNA11446.D

Sample Name

MB 01090601

Operator

50-32-8

19<u>3-39-5</u>

53-70-3

191-24-2

Skelton

Misc Info

MB 01090601

Date Acquired

17-Jan-06

Sample Multiplier

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine			not detected	50	0.98	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.79	10.00	ug/L	
35-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00	ug/L	
6-55-3	Benzofalanthracene			not detected	10	0.82	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.77	10.00	ug/L	
17-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.28	10.00	ug/L	
17-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected_	10	0.98	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.92	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	ug/L	

^{*} Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

not detected

not detected

not detected

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

Benzo[a]pyrene

Indeno[1,2,3-cd]pyrene

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

B= Compound in Related Blank

MDL= Method Detection Limit

20

20

NLE

NLE= No Limit Established

R.T.=Retention Time

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

Page 2 of 2

0.76

0.76

0.80

10.00 ug/L

10.00 ug/L

10.00 ug/L

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	FMETL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	l ah	Code 13461		MB-0109	06-01		
Lab Name.	1 141111			0000 10401	Ь	*****			
Project:	06-3488	30 Case No.: 60	0010 Le	ocation: UST	SDG	No.:			
Matrix: (soil/	water)	WATER		Lab Sample II): <u>M</u> E	3 0109060	1		
Sample wt/vol: 1000		1000 (g/ml) <u>N</u>	/IL	Lab File ID:	BN	IA11446.D			
Level: (low/med) LOW [Date Received	d: <u>1/5</u>	/2006	··-		
% Moisture: decanted: (Y/N) N Date Extracted:					d: 1/9	: 1/9/2006			
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 1/							1/17/2006		
Injection Vol	ume: <u>1.</u>	0 (uL)		Dilution Factor	r: <u>1.0</u>)			
GPC Cleanu	ıp: (Y/N)	NpH:							
			CON	CENTRATION U	NITS:				
Number TIC	s found:	1	(ug/L	or ug/Kg) <u>U</u>	G/L				
CAS NUMI	BER	COMPOUND NAME	=	RT	EST. (CONC.	Q		
1.		unknown hydrocarbo	n	6.82		7	J		

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name

BNA11453.D

Sample Name

6001005

Operator Date Acquired Skelton 17-Jan-06 Misc Info

910C-GW

Sample Multiplier 1

			_		Regulatory Level (ug/L)*		77	
CAS#	Name	R.T.	Response	Result		MDL	RL	Qualifiers
110-86-1	Pyridine	+		not detected	NLE	1.13	10.00 ug/L	
62-75-9	N-nitroso-dimethylamine	+		not detected	20	0.60	10.00 ug/L	
62-53-3	Aniline	+		not detected	NLE	2.38	10.00 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	0.71	10.00 ug/L	
541-73-1	1,3-Dichlorobenzene	+		not detected	600	1.02	10.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.99	10.00 ug/L	
100-51-6	Benzyl alcohol	+		not detected	NLE	0.66	10.00 ug/L	<u> </u>
95-50-1	1,2-Dichlorobenzene	ļ		not detected	600	0.96	10.00 ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.88	10.00 ug/L	ļ
621-64-7	n-Nitroso-di-n-propylamine			not detected	20	0.76	10.00 ug/L	
<i>67-72</i> -1	Hexachloroethane			not detected	10	0.96	10.00 ug/L	ļ
98-95-3	Nitrobenzene	4		not detected	10	0.86	10.00 ug/L	
78-59-1	Isophorone			not detected	100	0.76	10.00 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.89	10.00 ug/L	
91-20-3	Naphthalene			not detected	NLE	0.76	10.00 ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	1.37	10.00 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00 ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.01	10.00 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	50	0.92	10.00 ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	0.72	10.00 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00 ug/L	
131-11-3	Dimethylphthalate			not detected	7000	0.78	10.00 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	NLE	0.71	10.00 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00 ug/L	
83-32-9	Acenaphthene			not detected	400	0.73	10.00 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.81	10.00 ug/L	
84-66-2	Diethylphthalate			not detected	5000	0.96	10.00 ug/L	
86-73-7	Fluorene			not detected	300	0.71	10.00 ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.73	10.00 ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.11	10.00 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	20	0.62	10.00 ug/L	
103-33-3	Azobenzene			not detected	NLE	0.72	10.00 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.92	10.00 ug/L	
118-74-1	Hexachlorobenzene	T		not detected	10	0.95	10.00 ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.81	10.00 ug/L	
120-12-7	Anthracene	1		not detected	2000	0.76	10.00 ug/L	
84-74-2	Di-n-butylphthalate	1 1		not detected	900	0.92	10.00 ug/L	
206-44-0	Fluoranthene		ĺ	not detected	300	0.82	10.00 ug/L	

Page 1 of 2

Semi-Volatile Analysis Report Page 2

Data File Name

BNA11453.D

Sample Name

6001005

Operator

191-24-2

Skelton

Misc Info

910C-GW

Date Acquired

17-Jan-06

Sample Multiplier

					Regulatory Level				
CAS#	Name	R.T.	Response	Result	(ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine			not detected	50	0.98	10.00	ug/L	
129-00-0	Pyrene			not detected	200	0.79	10.00	ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00	ug/L	
56-55-3	Benzo[a]anthracene			not detected	10	0.82	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.77	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	1.28	10.00	ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00	ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	10	0.98	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.92	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.76	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.76	10.00	ug/L	

^{*} Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

Benzo[g,h,i]perylene

MDL= Method Detection Limit

NLE= No Limit Established

R.T.=Retention Time

B= Compound in Related Blank RL= Reporting Limit. The values between the MDL and RL are considered estimated.

Page 2 of 2

0.80

10.00 ug/L

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

		111117	(TIVEET IDEIVIII I	LD CCIVII CONDO		0100 011
Lab Name:	FMETL			Lab Code 13461		910C-GW
Project:	06-3488	<u>0</u> C	Case No.: 60010	Location: UST	_ SE	DG No.:
Matrix: (soil/v	vater)	WATER		Lab Sample	ID:	6001005
Sample wt/vo	ol:	1000	(g/ml) ML	Lab File ID:		BNA11453.D
Level: (low/n	ned)	LOW		Date Receiv	ed:	1/5/2006
% Moisture:		de	ecanted: (Y/N)	N Date Extrac	ted:	1/9/2006
Concentrated	d Extract	Volume:	1000 (uL)	Date Analyz	ed:	1/17/2006
Injection Volu	ıme: <u>1.0</u>) (uL)		Dilution Fac	tor:	1.0
GPC Cleanu	p: (Y/N)	N	_ pH:			
				CONCENTRATION	UNIT	「S:
Number TICs	s found:	1		(ug/L or ug/Kg)	UG/L	<u>-</u>

COMPOUND NAME

unknown hydrocarbon

CAS NUMBER

RT

6.82

EST. CONC.

Q

TPHC

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

Client:

U.S. Army

Project #:

60010

DPW. SELFM-PW-EV

Location:

910

Bldg. 173

Ft. Monmouth, NJ 07703

UST Reg. #:

Analysis:

OQA-QAM-025

Date Received:

05-Jan-06

Matrix:

11-Jan-06

Soil

Date Extracted:

Inst. ID.:

GC TPHC INST. #1

Extraction Method:

Shake 12-Jan-06

Column Type:

RTX-5, 0.32mm ID, 30M

Analysis Complete:

Injection Volume:

1uL

Analyst:

P.Skelton

Lab ID	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	RL	TPHC Result (mg/kg)
6001001	910C	1.00	15.79	77.48	79	409	ND
6001002	910E	1.00	15.73	76.37	80	416	ND
6001003	910W	1.00	15.19	78.22	81	421	ND
6001004	Dupe	1.00	15.56	77.39	80	415	ND
				,			
					-		
METHOD BLANK	MB-01110601	1.00	15.00	100.00	64	333	ND

ND = Not Detected

MDL = Method Detection Limit

RL = Reporting Limits

Note: The TPHC result between the MDL and RL are considered an estimated value

LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

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

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

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

Laboratory Manager or Environmental Consultant's Signature Date: 1 1271 06

Laboratory Certification # 13461

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

Laboratory Authentication Statement

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

Daniel K. Wright
Laboratory Manager