

ALPHA ANALYTICAL LABORATORIES

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MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England Laboratory Job Number: L0404321
Address: 399 Boylston Street
6th Floor
Boston, MA 02116 Date Received: 27-APR-2004
Attn: Jeremy Picard Date Reported: 04-MAY-2004
Project Number: 13606.03.02 Delivery Method: Alpha
Site: RAYTHEON

The following questions pertain only to MCP Analytical Methods

An affirmative response to questions A,B,C & D is required for "Presumptive Certainty" status

- A. Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set? YES
- B. Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? YES
- C. Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? YES
- D. **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3? NA

A response to questions E and F is required for "Presumptive Certainty" status

- E. Were all QC performance standards and recommendations for the specified method(s) achieved? NO
- F. Were results for all analyte-list compounds/elements for the specified method(s) reported? YES

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0404321
Date Reported: 04-MAY-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0404321-01	MW-219S	WAYLAND, MA
L0404321-02	MW-219M	WAYLAND, MA
L0404321-03	MW-221M	WAYLAND, MA
L0404321-04	MW-221D	WAYLAND, MA
L0404321-05	DUP-2	WAYLAND, MA
L0404321-06	MW-218S	WAYLAND, MA
L0404321-07	MW-218M	WAYLAND, MA
L0404321-08	MW-218D	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0404321

Volatile Organics

In reference to question E, the MS/MSD have high recoveries for dichlorodifluoromethane.

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0404321-01	Date Collected:	27-APR-2004 12:00
	MW-219S	Date Received :	27-APR-2004
Sample Matrix:	WATER	Date Reported :	04-MAY-2004
Condition of Sample:	Satisfactory	Field Prep:	None
Number & Type of Containers:	2-Vial		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B	0503 22:56	RY
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	ND	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	ND	ug/l	1.0			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0404321-01
MW-219S

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0503 22:56 RY		
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	106.	%		70-130			
Toluene-d8	98.0	%		70-130			
4-Bromofluorobenzene	105.	%		70-130			
Dibromofluoromethane	112.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0404321-02
MW-219M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0503 23:32		RY
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	109.	%		70-130			
Toluene-d8	98.0	%		70-130			
4-Bromofluorobenzene	107.	%		70-130			
Dibromofluoromethane	112.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0404321-03	Date Collected:	27-APR-2004 13:40
	MW-221M	Date Received :	27-APR-2004
Sample Matrix:	WATER	Date Reported :	04-MAY-2004
Condition of Sample:	Satisfactory	Field Prep:	None
Number & Type of Containers:	2-Vial		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B	0504 00:07 RY	
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	ND	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	ND	ug/l	1.0			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-03
 MW-221M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 00:07		RY
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	108.	%		70-130			
Toluene-d8	98.0	%		70-130			
4-Bromofluorobenzene	103.	%		70-130			
Dibromofluoromethane	110.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

<p>Laboratory Sample Number: L0404321-04 MW-221D</p> <p>Sample Matrix: WATER</p> <p>Condition of Sample: Satisfactory</p> <p>Number & Type of Containers: 2-Vial</p>	<p>Date Collected: 27-APR-2004 13:46</p> <p>Date Received : 27-APR-2004</p> <p>Date Reported : 04-MAY-2004</p> <p>Field Prep: None</p>
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PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B		0504 00:42 RY
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	6.9	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	4.4	ug/l	1.0			
cis-1,2-Dichloroethene	1.0	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-04
 MW-221D

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 00:42 RY		
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	106.	%		70-130			
Toluene-d8	98.0	%		70-130			
4-Bromofluorobenzene	108.	%		70-130			
Dibromofluoromethane	111.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0404321-05	Date Collected:	27-APR-2004 00:00
	DUP-2	Date Received :	27-APR-2004
Sample Matrix:	WATER	Date Reported :	04-MAY-2004
Condition of Sample:	Satisfactory	Field Prep:	None
Number & Type of Containers: 2-Vial			

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B	0504 01:18	RY
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	ND	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	ND	ug/l	1.0			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-05
 DUP-2

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 01:18 RY		
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	108.	%		70-130			
Toluene-d8	97.0	%		70-130			
4-Bromofluorobenzene	105.	%		70-130			
Dibromofluoromethane	113.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0404321-06	Date Collected: 27-APR-2004 14:12
MW-218S	Date Received : 27-APR-2004
Sample Matrix: WATER	Date Reported : 04-MAY-2004
Condition of Sample: Satisfactory	Field Prep: None
Number & Type of Containers: 4-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B				54 8260B		0504 01:53 RY	
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	1.0				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-06
 MW-218S

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 01:53		RY
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	109.	%		70-130			
Toluene-d8	97.0	%		70-130			
4-Bromofluorobenzene	103.	%		70-130			
Dibromofluoromethane	113.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0404321-07		Date Collected: 27-APR-2004 11:48
	MW-218M	Date Received : 27-APR-2004
Sample Matrix: WATER		Date Reported : 04-MAY-2004
Condition of Sample: Satisfactory		Field Prep: None
Number & Type of Containers: 2-Vial		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B	0504 02:28 RY	
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	15.	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	1.8	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	1.7	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	0.79	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	2.5	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	97.	ug/l	1.0			
cis-1,2-Dichloroethene	2.2	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-07
 MW-218M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 02:28 RY		
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	101.	%		70-130			
Toluene-d8	106.	%		70-130			
4-Bromofluorobenzene	117.	%		70-130			
Dibromofluoromethane	100.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number:	L0404321-08	Date Collected:	27-APR-2004 10:27
	MW-218D	Date Received :	27-APR-2004
Sample Matrix:	WATER	Date Reported :	04-MAY-2004
Condition of Sample:	Satisfactory	Field Prep:	None
Number & Type of Containers: 2-Vial			

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Volatile Organics by MCP 8260B				54 8260B	0504 03:04 RY	
Methylene chloride	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.75			
Chloroform	ND	ug/l	0.75			
Carbon tetrachloride	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	1.8			
Dibromochloromethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.75			
Tetrachloroethene	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
Bromodichloromethane	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
Bromoform	ND	ug/l	2.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Benzene	ND	ug/l	0.50			
Chloromethane	ND	ug/l	2.5			
Vinyl chloride	ND	ug/l	1.0			
Chloroethane	ND	ug/l	1.0			
1,1-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.75			
Trichloroethene	2.6	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	2.5			
1,3-Dichlorobenzene	ND	ug/l	2.5			
1,4-Dichlorobenzene	ND	ug/l	2.5			
Methyl tert butyl ether	ND	ug/l	1.0			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,2-Dibromoethane	ND	ug/l	2.0			
1,3-Dichloropropane	ND	ug/l	2.5			
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50			
o-Chlorotoluene	ND	ug/l	2.5			
p-Chlorotoluene	ND	ug/l	2.5			
Hexachlorobutadiene	ND	ug/l	1.0			
1,2,4-Trichlorobenzene	ND	ug/l	2.5			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
 CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404321-08
 MW-218D

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by MCP 8260B continued				54 8260B	0504 03:04		RY
Surrogate(s)	Recovery			QC Criteria			
1,2-Dichloroethane-d4	107.	%		70-130			
Toluene-d8	98.0	%		70-130			
4-Bromofluorobenzene	107.	%		70-130			
Dibromofluoromethane	112.	%		70-130			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0404321

Parameter	% Recovery	QC Criteria
Volatile Organics by MCP 8260B LCS for sample(s) 01-08 (WG169606)		
Methylene chloride	97	70-130
1,1-Dichloroethane	103	70-130
Chloroform	102	70-130
Carbon tetrachloride	105	70-130
1,2-Dichloropropane	97	70-130
Dibromochloromethane	88	70-130
1,1,2-Trichloroethane	87	70-130
Tetrachloroethene	103	70-130
Chlorobenzene	99	70-130
1,2-Dichloroethane	88	70-130
1,1,1-Trichloroethane	101	70-130
Bromodichloromethane	96	70-130
trans-1,3-Dichloropropene	80	70-130
cis-1,3-Dichloropropene	83	70-130
Bromoform	89	70-130
1,1,2,2-Tetrachloroethane	84	70-130
Benzene	101	70-130
Chloromethane	98	70-130
Vinyl chloride	90	70-130
Chloroethane	93	70-130
1,1-Dichloroethene	93	70-130
trans-1,2-Dichloroethene	98	70-130
Trichloroethene	98	70-130
1,2-Dichlorobenzene	96	70-130
1,3-Dichlorobenzene	102	70-130
1,4-Dichlorobenzene	97	70-130
Methyl tert butyl ether	89	70-130
cis-1,2-Dichloroethene	105	70-130
Dichlorodifluoromethane	82	70-130
1,2-Dibromoethane	84	70-130
1,3-Dichloropropane	87	70-130
1,1,1,2-Tetrachloroethane	97	70-130
o-Chlorotoluene	110	70-130
p-Chlorotoluene	106	70-130
Hexachlorobutadiene	96	70-130
1,2,4-Trichlorobenzene	77	70-130
Surrogate(s)		
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	111	70-130
Dibromofluoromethane	104	70-130

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0404321

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by MCP 8260B for sample(s) 01-08 (L0404321-06, WG169606)					
Methylene chloride	104	103	1	20	70-130
1,1-Dichloroethane	111	107	4	20	70-130
Chloroform	107	104	3	20	70-130
Carbon tetrachloride	116	108	7	20	70-130
1,2-Dichloropropane	106	103	3	20	70-130
Dibromochloromethane	103	102	1	20	70-130
1,1,2-Trichloroethane	109	107	2	20	70-130
Tetrachloroethene	109	104	5	20	70-130
Chlorobenzene	110	105	5	20	70-130
1,2-Dichloroethane	103	101	2	20	70-130
1,1,1-Trichloroethane	109	106	3	20	70-130
Bromodichloromethane	107	105	2	20	70-130
trans-1,3-Dichloropropene	96	95	1	20	70-130
cis-1,3-Dichloropropene	90	88	2	20	70-130
Bromoform	107	110	3	20	70-130
1,1,2,2-Tetrachloroethane	106	106	0	20	70-130
Benzene	110	106	4	20	70-130
Chloromethane	93	91	2	20	70-130
Vinyl chloride	100	92	8	20	70-130
Chloroethane	80	78	2	20	70-130
1,1-Dichloroethene	90	94	5	20	70-130
trans-1,2-Dichloroethene	103	100	3	20	70-130
Trichloroethene	102	98	4	20	70-130
1,2-Dichlorobenzene	104	104	0	20	70-130
1,3-Dichlorobenzene	107	105	2	20	70-130
1,4-Dichlorobenzene	105	103	2	20	70-130
Methyl tert butyl ether	89	93	4	20	70-130
cis-1,2-Dichloroethene	111	110	1	20	70-130
Dichlorodifluoromethane	139	144	4	20	70-130
1,2-Dibromoethane	98	99	1	20	70-130
1,3-Dichloropropane	106	103	3	20	70-130
1,1,1,2-Tetrachloroethane	113	107	5	20	70-130
o-Chlorotoluene	114	112	2	20	70-130
p-Chlorotoluene	108	109	1	20	70-130
Hexachlorobutadiene	95	93	2	20	70-130
1,2,4-Trichlorobenzene	72	76	6	20	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	105	104	1		70-130
Toluene-d8	102	101	1		70-130
4-Bromofluorobenzene	101	105	4		70-130
Dibromofluoromethane	105	105	0		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0404321

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-08 (WG169606-4)							
Volatile Organics by MCP 8260B				54 8260B	0503 16:26 RY		
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	ND	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
Bromodichloromethane	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Vinyl chloride	ND	ug/l	1.0				
Chloroethane	ND	ug/l	1.0				
1,1-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	2.5				
1,3-Dichlorobenzene	ND	ug/l	2.5				
1,4-Dichlorobenzene	ND	ug/l	2.5				
Methyl tert butyl ether	ND	ug/l	1.0				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,2-Dibromoethane	ND	ug/l	2.0				
1,3-Dichloropropane	ND	ug/l	2.5				
1,1,1,2-Tetrachloroethane	ND	ug/l	0.50				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	1.0				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	100.	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	107.	%	70-130				
Dibromofluoromethane	102.	%	70-130				

ALPHA ANALYTICAL LABORATORIES
ADDENDUM I

REFERENCES

54. Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods. MADEP BWSC. Final Methods. May 2003.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.
METHOD Method number by which analysis was performed.
ID Initials of the analyst.
ND Not detected in comparison to the reported detection limit.

Please note that all solid samples are reported on dry weight basis unless noted otherwise.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

**ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION**

Laboratory Job Number: L0404321

Were project specific reporting limits specified? YES

Cooler Information

Cooler Custody Seal

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0404321-01A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-01B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-02A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-02B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-03A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-03B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-04A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-04B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-05A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-05B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-06A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-06B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-06C	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-06D	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-07A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-07B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-08A	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260
L0404321-08B	Vial HCl preserved	A	NA	2.0 C	Y	Absent	MCP-8260

Container Comments

Container ID Comments



CHAIN OF CUSTODY

PAGE 1 OF 1

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: **ERM**

Address: **399 Baylston St Flc**

Boston, MA 02116

Phone: **617 646 7800**

Fax: **617 267 6447**

Email: **teresa.kennedy@erm.com**

These samples have been previously analyzed by Alpha
Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: **Raftman**

Project Location: **Weymouth, MA**

Project # **13666-03.02**

Project Manager: **J. Pineda**

ALPHA Quote #:

Turn-Around Time

Standard

Date Due: **5/4/04** Time:

RUSH (only confirmed if pre-approved)

Date Rec'd In Lab: **4/27/04**

ALPHA Job #: **0404331**

Report Information - Data Deliverables

FAX EMAIL

BADEX Add'l Deliverables

Regulatory Requirements/Report Limits

State / Fed Program Criteria

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

Yes No Are MCP Analytical Methods Required?
 Yes No Are Drinking Water Samples Submitted?
 Yes No Have you met minimum field QC requirements?

SAMPLE HANDLING

Filtration Done
 Not needed
 Lab to do
Preservation Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	ANALYSIS	TO T A L # B O T T L E S
04331.1	MW-219S	4/27/04	1200	LR	GW	2	2
2	MW-219M	4/27/04	1300	MH	GW	2	2
3	MW-221M	4/27/04	1340	MH	GW	2	2
4	MW-221D	4/27/04	1346	LR	GW	2	2
5	DR-2	4/27/04	2400	MH	GW	2	2
6	MW-21SS	4/27/04	1412	NG	GW	2	2
7	MW-21SM	4/27/04	1148	NG	GW	2	2
8	MW-21SD	4/27/04	1027	NG	GW	2	2
6	MW-21SS	4/27/04	1412	NG	GW	2	2

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

Container Type Preservative

V B

Relinquished By:

[Signature]

Date/Time

4/27/04 1640

Received By:

[Signature]

Date/Time

4/27/04 1650

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

IS YOUR PROJECT MCP ?