

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:** L0408097
Address: 399 Boylston Street
6th Floor **Date Received:** 23-JUL-2004
Boston, MA 02116 **Date Reported:** 30-JUL-2004
Attn: Jeremy Picard **Delivery Method:** Alpha
Project Number: 13606.03
Site: RAYTHEON

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0408097-01	MW-264M	WAYLAND, MA

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
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: L0408097-01	Date Collected: 23-JUL-2004 16:30
MW-264M	Date Received : 23-JUL-2004
Sample Matrix: WATER	Date Reported : 30-JUL-2004
Condition of Sample: Satisfactory	Field Prep: None
Number & Type of Containers: 2-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP ANAL	ID
Dissolved Gases by GC				53 -	0730 14:23 PS	
Methane	4.44	ug/l	0.300			
Ethene	1.39	ug/l	0.500			
Ethane	ND	ug/l	0.500			

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0408097

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Dissolved Gases by GC for sample(s) 01 (L0408097-01, WG177150)					
Methane	4.44	3.94	ug/l	12	25
Ethene	1.39	1.28	ug/l	8	25
Ethane	ND	ND	ug/l	NC	25

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0408097

Parameter	% Recovery	QC Criteria
Dissolved Gases by GC LCS for sample(s) 01 (WG177150)		
Methane	92	80-120
Ethene	85	80-120
Ethane	88	80-120
Dissolved Gases by GC SPIKE for sample(s) 01 (L0408097-01, WG177150)		
Methane	92	80-120
Ethene	90	80-120
Ethane	91	80-120

ALPHA ANALYTICAL LABORATORIES
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0408097

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01 (WG177150-4)							
Dissolved Gases by GC				53 -		0730	14:03 PS
Methane	ND	ug/l	0.300				
Ethene	ND	ug/l	0.500				
Ethane	ND	ug/l	0.500				

ALPHA ANALYTICAL LABORATORIES
ADDENDUM I

REFERENCES

53. Analysis of Dissolved Methane, Ethane & Ethylene in Groundwater by a Standard Gas Chromatographic Technique, Kampbell & Vandegrift, EPA-OK, Journal of Chrom, Vol 36, May 1998 & Technical Guidance for the Natural Attenuation Indicators, EPA-NE, July 2001.

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.



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

CHAIN OF CUSTODY

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Date Rec'd in Lab: 7-23-04

ALPHA Job #: 10408097

Project Information

Project Name: Redwood
 Project Location: Redwood, MA

Report Information - Data Deliverables

FAX EMAIL
 INDEX Add'l Deliverables

Billing Information

Same as Client info PO #:

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)

Standard RUSH (only confirmed if pre-approved)
 Date Due: 7-30-04 Time:

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Samplers Initials
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8097	DER-195	7/23/04	10:55	GWS	BT
	DER-21	7/23/04	11:45	GWS	BT
	DER-19M	7/23/04	09:40	GWS	BT
	MUO-204D	7/23/04	09:40	GWS	BT
	MUO-204HS	7/23/04	10:50	GWS	BT
	FD-05	7/23/04	2:00	GWS	BT
	1 ✓ MUO-204M	7/23/04	16:30	GWS	MC

ANALYSIS
 1200 000
 1200 000
 1200 000
 1200 000
 1200 000
 1200 000
 1200 000

Sample Specific Comments

ANALYSIS SAMPLES
 (See reverse side)
 OHS VICTOR (11/11/04)

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

Container Type	Date/Time	Preservative	Date/Time
1	7/23/04	B	7/23/04
1	7/23/04	C	7/23/04
1	7/23/04	A	7/23/04
1	7/23/04	B	7/23/04

IS YOUR PROJECT MCP ?

Relinquished By: [Signature] Date/Time: 7/23/04 1:20
 Received By: [Signature] Date/Time: 7/23/04 1:20

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.

TOTAL # BOTTLES