

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220 www.alphalab.com

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: L0511439  
Address: 399 Boylston Street  
6th Floor  
Boston, MA 02116 Date Received: 28-SEP-2005  
Attn: Jeremy Picard Date Reported: 05-OCT-2005  
Project Number: 0033366 Delivery Method: Alpha  
Site: RAYTHEON WAYLAND

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? YES
- F. Were results for all analyte-list compounds/elements for the specified method(s) reported? NO

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: Douglas Sheehey  
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0511439  
Date Reported: 05-OCT-2005

---

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0511439-01	MW-555S-20050926-01	WAYLAND, MA
L0511439-02	MW-555MA-20050926-01	WAYLAND, MA
L0511439-03	MW-555MB-20050926-01	WAYLAND, MA
L0511439-04	MW-555D-20050926-01	WAYLAND, MA
L0511439-05	MW-554D-20050927-01	WAYLAND, MA
L0511439-06	MW-554MB-20050927-01	WAYLAND, MA
L0511439-07	MW-554S-20050927-01	WAYLAND, MA
L0511439-08	MW-554MA-20050927-01	WAYLAND, MA
L0511439-09	MW-556D-20050927-01	WAYLAND, MA
L0511439-10	MW-556S-20050927-01	WAYLAND, MA
L0511439-11	MW-556M-20050927-01	WAYLAND, MA
L0511439-12	DUP-001-20050927-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES  
NARRATIVE REPORT

Laboratory Job Number: L0511439

---

Report Submission

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.













**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:	L0511439-06	Date Collected:	27-SEP-2005 10:00
	MW-554MB-20050927-01	Date Received :	28-SEP-2005
Sample Matrix:	WATER	Date Reported :	05-OCT-2005
Condition of Sample:	Satisfactory	Field Prep:	Field Filtered
Number & Type of Containers:	1-Plastic		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP    ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B		
Arsenic, Dissolved	ND	mg/l	0.005	60 6010B	0930 14:20 1003 19:10	MG

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:	L0511439-09	Date Collected:	27-SEP-2005 11:35
	MW-556D-20050927-01	Date Received :	28-SEP-2005
Sample Matrix:	WATER	Date Reported :	05-OCT-2005
Condition of Sample:	Satisfactory	Field Prep:	Field Filtered
Number & Type of Containers:	1-Plastic		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP    ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B		
Arsenic, Dissolved	ND	mg/l	0.005	60 6010B	0930 14:20 1003 19:22	MG

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







ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0511439

---

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-12 (WG215878-4, WG215878-5)					
Arsenic, Dissolved	100	102	2	20	80-120

---



ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0511439

---

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-12 (L0511439-02, WG215878-2)					
Arsenic, Dissolved	102	102	0	20	75-125

---

ALPHA ANALYTICAL LABORATORIES  
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0511439

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 01-12 (WG215878-3)							
Dissolved Metals by MCP 6000/7000 series				60	6010B		
Arsenic, Dissolved	ND	mg/l	0.005	60	6010B	0930 14:20	1003 18:12 MG

**ALPHA ANALYTICAL LABORATORIES  
ADDENDUM I**

---

**REFERENCES**

60. Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

**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.  
NI Not Ignitable.  
ug/cart Micrograms per Cartridge.

**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: L0511439**

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
L0511439-01A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-02A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-02B	Plastic 250ml HNO3 preserved				Y	Absent	MCP-AS-6010S
L0511439-02C	Plastic 250ml HNO3 preserved				Y	Absent	MCP-AS-6010S
L0511439-03A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-04A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-05A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-06A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-07A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-08A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-09A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-10A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-11A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S
L0511439-12A	Plastic 250ml HNO3 preserved	A	<2	2.3C	Y	Absent	MCP-AS-6010S

**Container Comments**

Container ID	Comments
--------------	----------



# CHAIN OF CUSTODY

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

### Client Information

Client: ERM  
Address: 309 Baylston St  
Boston MA 02116  
Phone: 617-646-7880  
Fax: 617-267-6447  
Email: jeremy.picard@erm.com

Project Name: Raytheon Wayland  
Project Location: Wayland MA  
Project #: 0033366  
Project Manager: J. Picard  
ALPHA Quote #:

### Turn-Around Time

Standard 10-5-05  
Date Due: 24 hr TAT on only needed samples

Other Project Specific Requirements/Comments/Detection Limits:  
\* Samples for As were field filtered

Date Rec'd in Lab: 9.28.05

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Regulatory Requirements/Report Limits

State/Fed Program Criteria

ALPHA Job #: 10S11439

### Billing Information

PO #:

### 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?

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	ANALYSIS	SAMPLE HANDLING
11439.1	MW-555S-20050926.01	9/26/05	16:40	GW	CL	82600 Dissolved AS	* 24 hr TAT on 8260
2	MW-555MA-20050926.01	9/26/05	16:10	GW	EL		* 24 hr TAT on 8260
3	MW-555MB-20050926.01	9/26/05	15:30	GW	CL		* 24 hr TAT on 8260
4	MW-555D-20050926.01	9/26/05	14:30	GW	CL		* 24 hr TAT on 8260
9	MW-555MA-20050926.01	9/26/05	16:40	GW	EL		* 24 hr TAT on 8260
2	MW-555MA-20050926.01	9/26/05	16:40	GW	EL		* 24 hr TAT on 8260
5	MW-555D-20050927.01	9/27/05	9:50	GW	EL		* 24 hr TAT on 8260
4	MW-555MB-20050927.01	9/27/05	10:00	GW	SN		* 24 hr TAT on 8260
1	MW-555S-20050927.01	9/27/05	10:18	GW	CR		* 24 hr TAT on 8260
8	MW-555MA-20050927.01	9/27/05	11:05	GW	EL		* 24 hr TAT on 8260

### QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

Container Type Preservative

V P  
B C

### IS YOUR PROJECT MCP ?

Relinquished By: [Signature]

Date/Time: 9/28/05 10:40

Received By: [Signature]

Date/Time: 9/28/05 16:00

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.



# CHAIN OF CUSTODY

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

### Client Information

Client: ERM

Address: 399 Boylston St

Boston, MA 02116

Phone: 617 646 7800

Fax: 617 267 6447

Email: jeremy.picard@erm.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

\* Samples for As were field filtered

### Project Information

Project Name: Raytheon-Dayland

Project Location: Dayland, MA

Project #: 0033366

Project Manager: J. Picard

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirm if pre-approved)

Date Due: 10-5-01 24 hr TAT only on AUTOSAM samples

Date Rec'd in Lab: 9-28-05

ALPHA Job #: 10511439

### Report Information - Data Deliverables

FAX  EMAIL

ADDEX  Adtl 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?

ANALYSIS  
0928  
Dissolved As

### 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		Sample Matrix	Sampler's Initials	Date	Time	Container Type	Preservative	Received By:	Date/Time	Sample Specific Comments
		Date	Time									
9	MU-556D-20050927-01	9/27/05	1135	GC	CIR	9/27/05	1135	V	P	[Signature]	9/28/05 1340	*24 hr TAT on 556D
10	MU-556S-20050927-01	9/27/05	1235	GC	QTN	9/27/05	1235	B	C	[Signature]	9/28/05 1040	*24 hr TAT on 556S
11	MU-556M-20050927-01	9/27/05	1245	GC	CR	9/27/05	1245	B	C	[Signature]	9/28/05 1040	*24 hr TAT on 556M
12	DOR-001-20050927-01	9/27/05	2400	GC	JW	9/27/05	2400	B	C	[Signature]	9/28/05 1240	
	TB-001-20050926-01	9/26/05	1600	-	JTK	9/26/05	1600	B	C	[Signature]	9/28/05 1240	

### QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Acquired By: [Signature]

Date/Time: 9/28/05 1340

Received By: [Signature]

Date/Time: 9/28/05 1040

Date/Time: 9/28/05 1240

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.