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

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 13606

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0407964

Date Received: 21-JUL-2004

Date Reported: 28-JUL-2004

Delivery Method: Alpha

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?	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: Scott McLean
This document electronically signed

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0407964
Date Reported: 28-JUL-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0407964-01	MW-267S	WAYLAND
L0407964-02	FD-06	WAYLAND
L0407964-03	MW-267M	WAYLAND
L0407964-04	MW-267D	WAYLAND
L0407964-05	MW-266MB	WAYLAND

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0407964

MCP Related Narratives:

Report Submission

In reference to question F, at the client's request, the samples were analyzed only for the compounds specified on the chain of custody.

Volatile Organics

L0407964-01 has elevated limits of detection due to the 4x dilutions required by the elevated concentrations of target compounds in the sample.

L0407964-02, -03 and -05 has elevated limits of detection due to the 10x dilutions required by the elevated concentrations of target compounds in the sample.

In reference to question E, the WG176804-2 LCSD has a high recovery for dichlorodifluoromethane, a difficult analyte.

In reference to question E, the WG176804-4 MS has a low recovery for Trichloroethene due to the 4X rule.

In reference to question E, the WG176804-5 MSD has a low recovery for Trichloroethene and a high RPD due to the 4X rule. Also has a high recovery for chloromethane.

In reference to question E, WG176804-7 LCSD has a high recovery for dichlorodifluoromethane, a difficult analyte.

In reference to question E, WG176764-1 LCS has a low recovery for Bromomethane, a difficult analyte.

In reference to question E, WG176764-2 LCSD has a low recovery for Bromomethane and a high recovery for 1,4-dioxane, both difficult analytes.

Metals

The method blank for Mn contains 0.00177 mg/l. All samples associated with the method blank contain concentrations of Mn that are 10X greater than the concentration of Mn in the method blank. No action will be taken.

The MS % recovery for Fe is invalid because the sample concentration is greater than four times the spike amount added.

The RPD between the MS and the MSD for Fe is outside of the acceptable limits for this method. The poor RPD is due to the invalid matrix spike .

Non-MCP Related Narratives

Sulfate

L0407964-01 and -03 have an elevated limit of detection due to the 2x dilutions required for the sample to fall within the calibration curve.

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: L0407964-01
MW-267S
Sample Matrix: WATER

Date Collected: 21-JUL-2004 11:20
Date Received : 21-JUL-2004
Date Reported : 28-JUL-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 4-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Alkalinity, Total	42.	mg CaCO3/L	2.0	30	2320B		0727 13:17	JT
Chloride	63.	mg/l	1.0	1	9251		0726 23:30	DD
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0721 23:04	DD
Sulfate	53.	mg/l	20.	1	9038	0722 12:00	0722 12:00	ST
Dissolved Metals by MCP 6000/7000 series								
Arsenic, Dissolved	0.0037	mg/l	0.0010	54	6020A	0722 14:40	0723 17:48	RW
Iron, Dissolved	11.7	mg/l	0.500	54	6020A	0722 14:40	0723 17:48	RW
Manganese, Dissolved	1.734	mg/l	0.0005	54	6020A	0722 14:40	0723 17:48	RW
Volatile Organics by MCP 8260B				60	8260B		0727 01:19	RY
Methylene chloride	ND	ug/l	20.					
1,1-Dichloroethane	ND	ug/l	3.0					
Chloroform	ND	ug/l	3.0					
Carbon tetrachloride	ND	ug/l	2.0					
1,2-Dichloropropane	ND	ug/l	7.0					
Dibromochloromethane	ND	ug/l	2.0					
1,1,2-Trichloroethane	ND	ug/l	3.0					
Tetrachloroethene	3.8	ug/l	2.0					
Chlorobenzene	ND	ug/l	2.0					
1,2-Dichloroethane	ND	ug/l	2.0					
1,1,1-Trichloroethane	ND	ug/l	2.0					
Bromodichloromethane	ND	ug/l	2.0					
trans-1,3-Dichloropropene	ND	ug/l	2.0					
cis-1,3-Dichloropropene	ND	ug/l	2.0					
Bromoform	ND	ug/l	8.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	2.0					
Chloromethane	ND	ug/l	10.					
Vinyl chloride	ND	ug/l	4.0					
Chloroethane	ND	ug/l	4.0					
1,1-Dichloroethene	ND	ug/l	2.0					
trans-1,2-Dichloroethene	ND	ug/l	3.0					
Trichloroethene	290	ug/l	2.0					
1,2-Dichlorobenzene	ND	ug/l	10.					
1,3-Dichlorobenzene	ND	ug/l	10.					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0407964-01
MW-267S

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				60 8260B		0727 01:19	RY
1,4-Dichlorobenzene	ND	ug/l	10.				
cis-1,2-Dichloroethene	73.	ug/l	2.0				
Dichlorodifluoromethane	ND	ug/l	20.				
1,2-Dibromoethane	ND	ug/l	8.0				
1,3-Dichloropropane	ND	ug/l	10.				
1,1,1,2-Tetrachloroethane	ND	ug/l	2.0				
o-Chlorotoluene	ND	ug/l	10.				
p-Chlorotoluene	ND	ug/l	10.				
Hexachlorobutadiene	ND	ug/l	4.0				
1,2,4-Trichlorobenzene	ND	ug/l	10.				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	108.	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	103.	%	70-130				
Dibromofluoromethane	105.	%	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: L0407964-02
FD-06
Sample Matrix: WATER

Date Collected: 21-JUL-2004 00:00
Date Received : 21-JUL-2004
Date Reported : 28-JUL-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series							
Arsenic, Dissolved	0.0037	mg/l	0.0010	54 6020A	0722 14:40	0723 18:16	RW
Volatile Organics by MCP 8260B				60 8260B		0727 01:55	RY
Methylene chloride	ND	ug/l	50.				
1,1-Dichloroethane	ND	ug/l	7.5				
Chloroform	ND	ug/l	7.5				
Carbon tetrachloride	ND	ug/l	5.0				
1,2-Dichloropropane	ND	ug/l	18.				
Dibromochloromethane	ND	ug/l	5.0				
1,1,2-Trichloroethane	ND	ug/l	7.5				
Tetrachloroethene	ND	ug/l	5.0				
Chlorobenzene	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	5.0				
1,1,1-Trichloroethane	ND	ug/l	5.0				
Bromodichloromethane	ND	ug/l	5.0				
trans-1,3-Dichloropropene	ND	ug/l	5.0				
cis-1,3-Dichloropropene	ND	ug/l	5.0				
Bromoform	ND	ug/l	20.				
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0				
Chloromethane	ND	ug/l	25.				
Vinyl chloride	ND	ug/l	10.				
Chloroethane	ND	ug/l	10.				
1,1-Dichloroethene	ND	ug/l	5.0				
trans-1,2-Dichloroethene	ND	ug/l	7.5				
Trichloroethene	320	ug/l	5.0				
1,2-Dichlorobenzene	ND	ug/l	25.				
1,3-Dichlorobenzene	ND	ug/l	25.				
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	77.	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				
1,2-Dibromoethane	ND	ug/l	20.				
1,3-Dichloropropane	ND	ug/l	25.				
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0				
o-Chlorotoluene	ND	ug/l	25.				
p-Chlorotoluene	ND	ug/l	25.				
Hexachlorobutadiene	ND	ug/l	10.				
1,2,4-Trichlorobenzene	ND	ug/l	25.				

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0407964-02
FD-06

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				60 8260B		0727 01:55	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	110.	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104.	%	70-130				
Dibromofluoromethane	108.	%	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: L0407964-03
MW-267M
Sample Matrix: WATER

Date Collected: 21-JUL-2004 12:40
Date Received : 21-JUL-2004
Date Reported : 28-JUL-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 3-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Alkalinity, Total	66.	mg CaCO3/L	2.0	30	2320B		0727 13:17	JT
Chloride	25.	mg/l	1.0	1	9251		0726 23:31	DD
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0721 23:06	DD
Sulfate	61.	mg/l	20.	1	9038	0722 12:00	0722 12:00	ST
Dissolved Metals by MCP 6000/7000 series								
Arsenic, Dissolved	0.0027	mg/l	0.0010	54	6020A	0722 14:40	0723 18:38	RW
Iron, Dissolved	20.8	mg/l	0.500	54	6020A	0722 14:40	0723 18:38	RW
Manganese, Dissolved	0.6625	mg/l	0.0005	54	6020A	0722 14:40	0723 18:38	RW
Volatile Organics by MCP 8260B				60	8260B		0727 02:31	RY
Methylene chloride	ND	ug/l	50.					
1,1-Dichloroethane	ND	ug/l	7.5					
Chloroform	ND	ug/l	7.5					
Carbon tetrachloride	ND	ug/l	5.0					
1,2-Dichloropropane	ND	ug/l	18.					
Dibromochloromethane	ND	ug/l	5.0					
1,1,2-Trichloroethane	ND	ug/l	7.5					
Tetrachloroethene	22.	ug/l	5.0					
Chlorobenzene	ND	ug/l	5.0					
1,2-Dichloroethane	ND	ug/l	5.0					
1,1,1-Trichloroethane	ND	ug/l	5.0					
Bromodichloromethane	ND	ug/l	5.0					
trans-1,3-Dichloropropene	ND	ug/l	5.0					
cis-1,3-Dichloropropene	ND	ug/l	5.0					
Bromoform	ND	ug/l	20.					
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0					
Chloromethane	ND	ug/l	25.					
Vinyl chloride	ND	ug/l	10.					
Chloroethane	ND	ug/l	10.					
1,1-Dichloroethene	ND	ug/l	5.0					
trans-1,2-Dichloroethene	ND	ug/l	7.5					
Trichloroethene	570	ug/l	5.0					
1,2-Dichlorobenzene	ND	ug/l	25.					
1,3-Dichlorobenzene	ND	ug/l	25.					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0407964-03
MW-267M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				60 8260B		0727 02:31	RY
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	230	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				
1,2-Dibromoethane	ND	ug/l	20.				
1,3-Dichloropropane	ND	ug/l	25.				
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0				
o-Chlorotoluene	ND	ug/l	25.				
p-Chlorotoluene	ND	ug/l	25.				
Hexachlorobutadiene	ND	ug/l	10.				
1,2,4-Trichlorobenzene	ND	ug/l	25.				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112.	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	106.	%	70-130				
Dibromofluoromethane	105.	%	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: L0407964-04
MW-267D
Sample Matrix: WATER

Date Collected: 21-JUL-2004 14:30
Date Received : 21-JUL-2004
Date Reported : 28-JUL-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series							
Arsenic, Dissolved	0.0072	mg/l	0.0010	54 6020A	0722 14:40	0723 18:44	RW
Volatile Organics by MCP 8260B				60 8260B		0727 18:06	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				
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				
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: L0407964-04
MW-267D

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				60 8260B		0727 18:06	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	108.	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	101.	%	70-130				
Dibromofluoromethane	104.	%	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: L0407964-05
MW-266MB
Sample Matrix: WATER

Date Collected: 21-JUL-2004 15:40
Date Received : 21-JUL-2004
Date Reported : 28-JUL-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 2-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Alkalinity, Total	70.	mg CaCO3/L	2.0	30	2320B		0727 13:17	JT
Chloride	7.8	mg/l	1.0	1	9251		0726 23:32	DD
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0721 23:06	DD
Sulfate	31.	mg/l	10.	1	9038	0722 12:00	0722 12:00	ST
Dissolved Metals by MCP 6000/7000 series								
Iron, Dissolved	21.3	mg/l	0.500	54	6020A	0722 14:40	0723 18:49	RW
Manganese, Dissolved	0.1556	mg/l	0.0005	54	6020A	0722 14:40	0723 18:49	RW
Volatile Organics by MCP 8260B				60	8260B		0727 18:42	RY
Methylene chloride	ND	ug/l	50.					
1,1-Dichloroethane	ND	ug/l	7.5					
Chloroform	ND	ug/l	7.5					
Carbon tetrachloride	ND	ug/l	5.0					
1,2-Dichloropropane	ND	ug/l	18.					
Dibromochloromethane	ND	ug/l	5.0					
1,1,2-Trichloroethane	ND	ug/l	7.5					
Tetrachloroethene	53.	ug/l	5.0					
Chlorobenzene	ND	ug/l	5.0					
1,2-Dichloroethane	ND	ug/l	5.0					
1,1,1-Trichloroethane	ND	ug/l	5.0					
Bromodichloromethane	ND	ug/l	5.0					
trans-1,3-Dichloropropene	ND	ug/l	5.0					
cis-1,3-Dichloropropene	ND	ug/l	5.0					
Bromoform	ND	ug/l	20.					
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0					
Chloromethane	ND	ug/l	25.					
Vinyl chloride	26.	ug/l	10.					
Chloroethane	ND	ug/l	10.					
1,1-Dichloroethene	ND	ug/l	5.0					
trans-1,2-Dichloroethene	ND	ug/l	7.5					
Trichloroethene	390	ug/l	5.0					
1,2-Dichlorobenzene	ND	ug/l	25.					
1,3-Dichlorobenzene	ND	ug/l	25.					
1,4-Dichlorobenzene	ND	ug/l	25.					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0407964-05
MW-266MB

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				60 8260B		0727 18:42	RY
cis-1,2-Dichloroethene	290	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				
1,2-Dibromoethane	ND	ug/l	20.				
1,3-Dichloropropane	ND	ug/l	25.				
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0				
o-Chlorotoluene	ND	ug/l	25.				
p-Chlorotoluene	ND	ug/l	25.				
Hexachlorobutadiene	ND	ug/l	10.				
1,2,4-Trichlorobenzene	ND	ug/l	25.				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	107.	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	101.	%	70-130				
Dibromofluoromethane	106.	%	70-130				

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

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0407964

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Alkalinity, Total for sample(s) 01,03,05 (L0407942-01, WG176806)					
Alkalinity, Total	100	100	mg CaCO3/L	0	4
Chloride for sample(s) 01,03,05 (L0407964-01, WG176724)					
Chloride	63.	62.	mg/l	2	7
Nitrogen, Nitrate for sample(s) 01,03,05 (L0407964-01, WG176340)					
Nitrogen, Nitrate	ND	ND	mg/l	NC	6
Sulfate for sample(s) 01,03,05 (L0407909-05, WG176385)					
Sulfate	29.	30.	mg/l	3	14

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0407964

Parameter	% Recovery	QC Criteria
Alkalinity, Total LCS for sample(s) 01,03,05 (WG176806)		
Alkalinity, Total	106	85-115
Chloride LCS for sample(s) 01,03,05 (WG176724)		
Chloride	97	84-110
Nitrogen, Nitrate LCS for sample(s) 01,03,05 (WG176340)		
Nitrogen, Nitrate	98	88-105
Sulfate LCS for sample(s) 01,03,05 (WG176385)		
Sulfate	100	84-108
Alkalinity, Total SPIKE for sample(s) 01,03,05 (L0407942-02, WG176806)		
Alkalinity, Total	96	86-116
Chloride SPIKE for sample(s) 01,03,05 (L0407964-01, WG176724)		
Chloride	80	58-140
Nitrogen, Nitrate SPIKE for sample(s) 01,03,05 (L0407964-01, WG176340)		
Nitrogen, Nitrate	100	83-120
Sulfate SPIKE for sample(s) 01,03,05 (L0407909-01, WG176385)		
Sulfate	125	55-147

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407964

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-05 (WG176441-2, WG176441)					
Arsenic, Dissolved	88	91	3		75-125
Iron, Dissolved	100	100	0		75-125
Manganese, Dissolved	99	101	2		75-125
Volatile Organics by MCP 8260B for sample(s) 01-03 (WG176804-7, WG176804)					
Methylene chloride	96	96	3	25	70-130
1,1-Dichloroethane	106	106	9	25	70-130
Chloroform	104	104	5	25	70-130
Carbon tetrachloride	99	99	13	25	70-130
1,2-Dichloropropane	107	107	4	25	70-130
Dibromochloromethane	96	96	3	25	70-130
1,1,2-Trichloroethane	104	104	1	25	70-130
Tetrachloroethene	104	104	7	25	70-130
Chlorobenzene	110	110	5	25	70-130
1,2-Dichloroethane	104	104	2	25	70-130
1,1,1-Trichloroethane	103	103	8	25	70-130
Bromodichloromethane	107	107	5	25	70-130
trans-1,3-Dichloropropene	92	92	2	25	70-130
cis-1,3-Dichloropropene	105	105	5	25	70-130
Bromoform	100	100	5	50	70-130
1,1,2,2-Tetrachloroethane	99	99	1	25	70-130
Chloromethane	109	109	9	50	70-130
Vinyl chloride	114	114	4	25	70-130
Chloroethane	123	123	11	25	70-130
1,1-Dichloroethene	90	90	5	25	70-130
trans-1,2-Dichloroethene	100	100	11	25	70-130
Trichloroethene	105	105	6	25	70-130
1,2-Dichlorobenzene	105	105	3	25	70-130
1,3-Dichlorobenzene	106	106	4	25	70-130
1,4-Dichlorobenzene	107	107	4	25	70-130
cis-1,2-Dichloroethene	104	104	6	25	70-130
Dichlorodifluoromethane	143	143	12	50	70-130
1,2-Dibromoethane	100	100	1	25	70-130
1,3-Dichloropropane	102	102	1	25	70-130
1,1,1,2-Tetrachloroethane	107	107	5	25	70-130
o-Chlorotoluene	109	109	6	25	70-130
p-Chlorotoluene	108	108	6	25	70-130
Hexachlorobutadiene	96	96	9	25	70-130
1,2,4-Trichlorobenzene	99	99	3	25	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	100	0		70-130
Toluene-d8	99	99	0		70-130
4-Bromofluorobenzene	99	99	0		70-130
Dibromofluoromethane	104	104	0		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407964

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 04-05 (WG176875-1, WG176875)					
Methylene chloride	93	85	9	25	70-130
1,1-Dichloroethane	92	86	7	25	70-130
Chloroform	88	84	5	25	70-130
Carbon tetrachloride	90	84	7	25	70-130
1,2-Dichloropropane	90	87	3	25	70-130
Dibromochloromethane	89	89	0	25	70-130
1,1,2-Trichloroethane	93	93	0	25	70-130
Tetrachloroethene	94	88	7	25	70-130
Chlorobenzene	95	93	2	25	70-130
Trichlorofluoromethane	100	94	6	25	70-130
1,2-Dichloroethane	93	91	2	25	70-130
1,1,1-Trichloroethane	95	87	9	25	70-130
Bromodichloromethane	94	90	4	25	70-130
trans-1,3-Dichloropropene	84	85	1	25	70-130
cis-1,3-Dichloropropene	89	87	2	25	70-130
1,1-Dichloropropene	85	80	6	25	70-130
Bromoform	93	99	6	50	70-130
1,1,2,2-Tetrachloroethane	89	96	8	25	70-130
Benzene	87	83	5	25	70-130
Toluene	90	86	5	25	70-130
Ethylbenzene	95	91	4	25	70-130
Chloromethane	116	113	3	50	70-130
Bromomethane	60	61	2	50	70-130
Vinyl chloride	94	88	7	25	70-130
Chloroethane	97	88	10	25	70-130
1,1-Dichloroethene	84	77	9	25	70-130
trans-1,2-Dichloroethene	84	81	4	25	70-130
Trichloroethene	92	86	7	25	70-130
1,2-Dichlorobenzene	92	93	1	25	70-130
1,3-Dichlorobenzene	93	92	1	25	70-130
1,4-Dichlorobenzene	93	92	1	25	70-130
Methyl tert butyl ether	102	104	2	25	70-130
p/m-Xylene	97	92	5	25	70-130
o-Xylene	94	91	3	25	70-130
cis-1,2-Dichloroethene	92	83	10	25	70-130
Dibromomethane	92	94	2	25	70-130
1,2,3-Trichloropropane	90	94	4	25	70-130
Styrene	95	93	2	25	70-130
Dichlorodifluoromethane	121	114	6	50	70-130
Acetone	120	120	0	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	108	113	5	50	70-130
4-Methyl-2-pentanone	96	96	0	50	70-130
2-Hexanone	116	117	1	50	70-130
Bromochloromethane	95	94	1	25	70-130
Tetrahydrofuran	117	118	1	25	70-130
2,2-Dichloropropane	95	85	11	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0407964

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 04-05 (WG176875-1, WG176875)					
1,2-Dibromoethane	90	90	0	25	70-130
1,3-Dichloropropane	91	90	1	25	70-130
1,1,1,2-Tetrachloroethane	97	94	3	25	70-130
Bromobenzene	92	93	1	25	70-130
n-Butylbenzene	80	71	12	25	70-130
sec-Butylbenzene	88	81	8	25	70-130
tert-Butylbenzene	89	84	6	25	70-130
o-Chlorotoluene	96	94	2	25	70-130
p-Chlorotoluene	95	92	3	25	70-130
1,2-Dibromo-3-chloropropane	88	92	4	50	70-130
Hexachlorobutadiene	89	78	13	25	70-130
Isopropylbenzene	94	88	7	25	70-130
p-Isopropyltoluene	84	76	10	25	70-130
Naphthalene	77	79	3	25	70-130
n-Propylbenzene	94	90	4	25	70-130
1,2,3-Trichlorobenzene	79	77	3	25	70-130
1,2,4-Trichlorobenzene	78	75	4	25	70-130
1,3,5-Trimethylbenzene	89	84	6	25	70-130
1,2,4-Trimethylbenzene	89	85	5	25	70-130
Ethyl ether	96	94	2	25	70-130
Isopropyl Ether	100	98	2	25	70-130
Ethyl-Tert-Butyl-Ether	97	97	0	25	70-130
Tertiary-Amyl Methyl Ether	95	96	1	25	70-130
1,4-Dioxane	128	133	4	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	103	104	1		70-130
Toluene-d8	98	100	2		70-130
4-Bromofluorobenzene	95	100	5		70-130
Dibromofluoromethane	104	104	0		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0407964

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-05 (L0407964-01, WG176441)					
Arsenic, Dissolved	96	99	3	20	75-125
Iron, Dissolved	60	90	40	20	75-125
Manganese, Dissolved	84	95	12	20	75-125
Volatile Organics by MCP 8260B for sample(s) 01-03 (L0407964-01, WG176804)					
Methylene chloride	129	107	19	30	70-130
1,1-Dichloroethane	106	99	7	30	70-130
Chloroform	94	89	5	30	70-130
Carbon tetrachloride	98	91	7	30	70-130
1,2-Dichloropropane	95	92	3	30	70-130
Dibromochloromethane	95	92	3	30	70-130
1,1,2-Trichloroethane	99	96	3	30	70-130
Tetrachloroethene	97	92	5	30	70-130
Chlorobenzene	101	96	5	30	70-130
1,2-Dichloroethane	97	95	2	30	70-130
1,1,1-Trichloroethane	112	100	11	30	70-130
Bromodichloromethane	100	96	4	30	70-130
trans-1,3-Dichloropropene	90	86	5	30	70-130
cis-1,3-Dichloropropene	94	93	1	30	70-130
Bromoform	108	100	8	30	70-130
1,1,2,2-Tetrachloroethane	99	94	5	30	70-130
Chloromethane	126	139	10	30	70-130
Vinyl chloride	106	103	3	30	70-130
Chloroethane	114	109	4	30	70-130
1,1-Dichloroethene	88	84	5	30	70-130
trans-1,2-Dichloroethene	91	84	8	30	70-130
Trichloroethene	68	24	96	30	70-130
1,2-Dichlorobenzene	100	94	6	30	70-130
1,3-Dichlorobenzene	100	95	5	30	70-130
1,4-Dichlorobenzene	100	95	5	30	70-130
cis-1,2-Dichloroethene	92	80	14	30	70-130
Dichlorodifluoromethane	129	122	6	30	70-130
1,2-Dibromoethane	95	93	2	30	70-130
1,3-Dichloropropane	95	94	1	30	70-130
1,1,1,2-Tetrachloroethane	103	98	5	30	70-130
o-Chlorotoluene	102	96	6	30	70-130
p-Chlorotoluene	101	95	6	30	70-130
Hexachlorobutadiene	74	87	16	30	70-130
1,2,4-Trichlorobenzene	77	80	4	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	96	50	63		70-130
Toluene-d8	98	50	65		70-130
4-Bromofluorobenzene	107	55	64		70-130
Dibromofluoromethane	97	52	60		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407964

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03,05 (WG176806-1)								
Alkalinity, Total	ND	mg CaCO3/L	2.0	30	2320B		0727 13:17	JT
Blank Analysis for sample(s) 01,03,05 (WG176724-2)								
Chloride	ND	mg/l	1.0	1	9251		0726 22:29	DD
Blank Analysis for sample(s) 01,03,05 (WG176340-2)								
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0721 22:39	DD
Blank Analysis for sample(s) 01,03,05 (WG176385-1)								
Sulfate	ND	mg/l	10.	1	9038	0722 12:00	0722 12:00	ST
Blank Analysis for sample(s) 01-05 (WG176441-1)								
Dissolved Metals by MCP 6000/7000 series								
Arsenic, Dissolved	ND	mg/l	0.0010	54	6020A	0722 14:40	0723 16:41	RW
Iron, Dissolved	ND	mg/l	0.500	54	6020A	0722 14:40	0723 16:41	RW
Manganese, Dissolved	0.0018	mg/l	0.0005	54	6020A	0722 14:40	0723 16:41	RW
Blank Analysis for sample(s) 01-03 (WG176804-8)								
Volatile Organics by MCP 8260B				60	8260B		0726 16:59	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					
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					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407964

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG176804-8)							
Volatile Organics by MCP 8260B continued				60 8260B		0726 16:59	RY
1,4-Dichlorobenzene	ND	ug/l	2.5				
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	105.	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102.	%	70-130				
Dibromofluoromethane	103.	%	70-130				
Blank Analysis for sample(s) 04-05 (WG176875-3)							
Volatile Organics by MCP 8260B				60 8260B		0727 16:55	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				
Trichlorofluoromethane	ND	ug/l	2.5				
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				
1,1-Dichloropropene	ND	ug/l	2.5				
Bromoform	ND	ug/l	2.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Benzene	ND	ug/l	0.50				
Toluene	ND	ug/l	0.75				
Ethylbenzene	ND	ug/l	0.50				
Chloromethane	ND	ug/l	2.5				
Bromomethane	ND	ug/l	1.0				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407964

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04-05 (WG176875-3)							
Volatile Organics by MCP 8260B continued				60 8260B		0727 16:55	RY
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				
p/m-Xylene	ND	ug/l	0.50				
o-Xylene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
Dibromomethane	ND	ug/l	5.0				
1,2,3-Trichloropropane	ND	ug/l	5.0				
Styrene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
Acetone	ND	ug/l	5.0				
Carbon disulfide	ND	ug/l	5.0				
2-Butanone	ND	ug/l	5.0				
4-Methyl-2-pentanone	ND	ug/l	5.0				
2-Hexanone	ND	ug/l	5.0				
Bromochloromethane	ND	ug/l	2.5				
Tetrahydrofuran	ND	ug/l	10.				
2,2-Dichloropropane	ND	ug/l	2.5				
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				
Bromobenzene	ND	ug/l	2.5				
n-Butylbenzene	ND	ug/l	0.50				
sec-Butylbenzene	ND	ug/l	0.50				
tert-Butylbenzene	ND	ug/l	2.5				
o-Chlorotoluene	ND	ug/l	2.5				
p-Chlorotoluene	ND	ug/l	2.5				
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	1.0				
Isopropylbenzene	ND	ug/l	0.50				
p-Isopropyltoluene	ND	ug/l	0.50				
Naphthalene	ND	ug/l	2.5				
n-Propylbenzene	ND	ug/l	0.50				
1,2,3-Trichlorobenzene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
1,3,5-Trimethylbenzene	ND	ug/l	2.5				
1,2,4-Trimethylbenzene	ND	ug/l	2.5				
Ethyl ether	ND	ug/l	2.5				
Isopropyl Ether	ND	ug/l	2.0				
Ethyl-Tert-Butyl-Ether	ND	ug/l	2.0				
Tertiary-Amyl Methyl Ether	ND	ug/l	2.0				
1,4-Dioxane	ND	ug/l	250				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0407964

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04-05 (WG176875-3)							
Volatile Organics by MCP 8260B continued				60 8260B		0727 16:55	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	108.	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	105.	%	70-130				
Dibromofluoromethane	103.	%	70-130				

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

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

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.

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: L0407964

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0407964-01A	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-01B	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-01C	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-01D	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-01E	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-AS-6020S
L0407964-01F	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-FE-6020S, MCP-MN-6020S
L0407964-01G	Plastic 500ml unpreserved	A	=7	2.4 C	Y	Absent	ALK-T-2320, CL-9251, NO3-4500, SO4-9038
L0407964-01L	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-AS-6020S
L0407964-02A	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-02B	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-02C	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-AS-6020S
L0407964-03A	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-03B	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-03C	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-AS-6020S
L0407964-03D	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-FE-6020S, MCP-MN-6020S
L0407964-03E	Plastic 500ml unpreserved	A	=7	2.4 C	Y	Absent	ALK-T-2320, CL-9251, NO3-4500, SO4-9038
L0407964-04A	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-04B	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-04C	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-AS-6020S
L0407964-05A	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-05B	Vial HCl preserved	A	N/A	2.4 C	Y	Absent	MCP-8260-04
L0407964-05D	Plastic 250ml HNO3 preserved	A	<2	2.4 C	Y	Absent	MCP-FE-6020S, MCP-MN-6020S
L0407964-05E	Plastic 500ml unpreserved	A	=7	2.4 C	Y	Absent	ALK-T-2320, CL-9251, NO3-4500, SO4-9038

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7/21

ALPHA Job #: L0407964

ALPHA

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 ~~837~~ 6447
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon
Project Location: Wayland, MA
Project #: 136006
Project Manager: J. Picard
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 7/28 Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ 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?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

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

ANALYSIS: VOC 8021 | Diss As | Cl, Nitrate, SO4, Alk | Diss Fe, Mn | Diss Meth, Ethane, Ethene

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8021	Diss As	Cl, Nitrate, SO4, Alk	Diss Fe, Mn	Diss Meth, Ethane, Ethene	Sample Specific Comments	Total # Bottles
7964.1	MW-267S	7-21-04	1100	GW	BT	2	1	1	1	2	*Metals samples	7
1	MS/MSD MW-267S	7-21-04	1120	GW	BT	2	1				field filtered	3
2	FD-06	7-21-04	2400	GW	BT	2	1				using 0.45 micron	3
3	MW-267M	7-21-04	1240	GW	BT	2	1	1	1	2	filter	7
4	MW-267D	7-21-04	1430	GW	BT	2	1					3
5	MW-266MB	7-21-04	1540	GW	BT	2		1	1	2		6

	VOC 8021	Diss As	Cl, Nitrate, SO4, Alk	Diss Fe, Mn	Diss Meth, Ethane, Ethene
Container Type	V	P	P	P	V
Preservative	B	C	A	C	B

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7-21-04 1652	[signature]	7/21/04 1652
[signature]	7/21 1815	[signature]	7/21 1815

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.

FORM NO: 01-01(I)