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: 0013606.03.02

Site: RAYTHEON-WAYLAND

Laboratory Job Number: L0404519

Date Received: 30-APR-2004

Date Reported: 07-MAY-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: James Todaro
This document electronically signed

Laboratory Job Number: L0404519
Date Reported: 07-MAY-2004

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0404519-01	MW-267S	WAYLAND, MA
L0404519-02	MW-267M	WAYLAND, MA
L0404519-03	TB	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0404519

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

L0404519-01 has elevated limits of detection due to the 2.5x dilutions required by the elevated concentrations of target compounds in the sample.

L0404519-02 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 MS/MSD have 0% recoveries for trichloroethene because the sample concentration is greater than four times the spike amount added. Also, the MS/MSD have low recoveries and a high RPD for cis-1,2-dichloroethene due to the native concentration of this analyte in the sample.

Non-MCP Related Narratives:

Sulfate

L0404519-01 has an elevated limit of detection due to the 2.5x dilutions required for the sample to fall within the calibration curve.

L0404519-02 has 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: L0404519-01
MW-267S
Sample Matrix: WATER

Date Collected: 30-APR-2004 13:30
Date Received : 30-APR-2004
Date Reported : 07-MAY-2004

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 3-Plastic,4-Vial

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Alkalinity, Total	36.	mg CaCO3/L	2.0	30	2320B		0506 16:17	ED
Chloride	60.	mg/l	1.0	1	9251		0503 22:25	DD
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0430 22:15	DD
Sulfate	48.	mg/l	25.	1	9038		0506 16:50	JT
Dissolved Metals								
Arsenic, Dissolved	ND	mg/l	0.005	54	6010B	0503 13:00	0504 14:55	MG
Iron, Dissolved	9.1	mg/l	0.05	54	6010B	0503 13:00	0504 14:55	MG
Manganese, Dissolved	1.8	mg/l	0.01	54	6010B	0503 13:00	0504 14:55	MG
Volatile Organics by MCP 8260B				54	8260B		0506 18:57	RY
Methylene chloride	ND	ug/l	12.					
1,1-Dichloroethane	ND	ug/l	1.9					
Chloroform	ND	ug/l	1.9					
Carbon tetrachloride	ND	ug/l	1.2					
1,2-Dichloropropane	ND	ug/l	4.4					
Dibromochloromethane	ND	ug/l	1.2					
1,1,2-Trichloroethane	ND	ug/l	1.9					
Tetrachloroethene	1.8	ug/l	1.2					
Chlorobenzene	ND	ug/l	1.2					
1,2-Dichloroethane	ND	ug/l	1.2					
1,1,1-Trichloroethane	ND	ug/l	1.2					
Bromodichloromethane	ND	ug/l	1.2					
trans-1,3-Dichloropropene	ND	ug/l	1.2					
cis-1,3-Dichloropropene	ND	ug/l	1.2					
Bromoform	ND	ug/l	5.0					
1,1,2,2-Tetrachloroethane	ND	ug/l	1.2					
Chloromethane	ND	ug/l	6.2					
Vinyl chloride	ND	ug/l	2.5					
Chloroethane	ND	ug/l	2.5					
1,1-Dichloroethene	ND	ug/l	1.2					
trans-1,2-Dichloroethene	ND	ug/l	1.9					
Trichloroethene	180	ug/l	1.2					
1,2-Dichlorobenzene	ND	ug/l	6.2					
1,3-Dichlorobenzene	ND	ug/l	6.2					

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

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0404519-01
MW-267S

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				54 8260B		0506 18:57	RY
1,4-Dichlorobenzene	ND	ug/l	6.2				
cis-1,2-Dichloroethene	50.	ug/l	1.2				
Dichlorodifluoromethane	ND	ug/l	12.				
1,2-Dibromoethane	ND	ug/l	5.0				
1,3-Dichloropropane	ND	ug/l	6.2				
1,1,1,2-Tetrachloroethane	ND	ug/l	1.2				
o-Chlorotoluene	ND	ug/l	6.2				
p-Chlorotoluene	ND	ug/l	6.2				
Hexachlorobutadiene	ND	ug/l	2.5				
1,2,4-Trichlorobenzene	ND	ug/l	6.2				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	100.	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	122.	%	70-130				
Dibromofluoromethane	99.0	%	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: L0404519-02
MW-267M
Sample Matrix: WATER

Date Collected: 30-APR-2004 12:15
Date Received : 30-APR-2004
Date Reported : 07-MAY-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	38.	mg CaCO3/L	2.0	30	2320B		0506 16:17	ED
Chloride	25.	mg/l	1.0	1	9251		0503 22:27	DD
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0430 22:03	DD
Sulfate	67.	mg/l	20.	1	9038		0506 16:50	JT
Dissolved Metals								
Arsenic, Dissolved	ND	mg/l	0.005	54	6010B	0503 13:00	0504 14:59	MG
Iron, Dissolved	22.	mg/l	0.05	54	6010B	0503 13:00	0504 14:59	MG
Manganese, Dissolved	0.69	mg/l	0.01	54	6010B	0503 13:00	0504 14:59	MG
Volatile Organics by MCP 8260B				54	8260B		0506 19:34	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	12.	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	480	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: L0404519-02
MW-267M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				54 8260B		0506 19:34	RY
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	180	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	99.0	%	70-130				
Toluene-d8	100.	%	70-130				
4-Bromofluorobenzene	126.	%	70-130				
Dibromofluoromethane	101.	%	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: L0404519-03 TB
Sample Matrix: WATER

Date Collected: 19-FEB-2004 11:40
Date Received : 30-APR-2004
Date Reported : 07-MAY-2004

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				54 8260B		0506 20:11	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: L0404519-03
TB

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B continued				54 8260B		0506 20:11	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	97.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	130.	%	70-130				
Dibromofluoromethane	101.	%	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: L0404519

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Alkalinity, Total for sample(s) 01-02 (L0404519-02, WG169895)					
Alkalinity, Total	38.	38.	mg CaCO3/L	0	4
Chloride for sample(s) 01-02 (L0404519-01, WG169562)					
Chloride	60.	60.	mg/l	0	7
Nitrogen, Nitrate for sample(s) 01-02 (L0404519-01, WG169434)					
Nitrogen, Nitrate	ND	ND	mg/l	NC	6
Sulfate for sample(s) 01-02 (L0404385-01, WG169919)					
Sulfate	85.	83.	mg/l	2	14

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0404519

Parameter	% Recovery	QC Criteria
Alkalinity, Total LCS for sample(s) 01-02 (WG169895)		
Alkalinity, Total	106	85-115
Chloride LCS for sample(s) 01-02 (WG169562)		
Chloride	97	84-110
Nitrogen, Nitrate LCS for sample(s) 01-02 (WG169434)		
Nitrogen, Nitrate	94	88-105
Sulfate LCS for sample(s) 01-02 (WG169919)		
Sulfate	95	84-108
Dissolved Metals LCS for sample(s) 01-02 (WG169601)		
Arsenic, Dissolved	109	80-120
Iron, Dissolved	100	80-120
Manganese, Dissolved	102	80-120
Volatile Organics by MCP 8260B LCS for sample(s) 01-03 (WG170023)		
Methylene chloride	92	70-130
1,1-Dichloroethane	102	70-130
Chloroform	90	70-130
Carbon tetrachloride	95	70-130
1,2-Dichloropropane	93	70-130
Dibromochloromethane	77	70-130
1,1,2-Trichloroethane	79	70-130
Tetrachloroethene	83	70-130
Chlorobenzene	89	70-130
1,2-Dichloroethane	90	70-130
1,1,1-Trichloroethane	93	70-130
Bromodichloromethane	89	70-130
trans-1,3-Dichloropropene	72	70-130
cis-1,3-Dichloropropene	86	70-130
Bromoform	72	70-130
1,1,2,2-Tetrachloroethane	89	70-130
Chloromethane	86	70-130
Vinyl chloride	89	70-130
Chloroethane	91	70-130
1,1-Dichloroethene	85	70-130
trans-1,2-Dichloroethene	89	70-130
Trichloroethene	93	70-130
1,2-Dichlorobenzene	87	70-130
1,3-Dichlorobenzene	89	70-130
1,4-Dichlorobenzene	88	70-130
cis-1,2-Dichloroethene	95	70-130
Dichlorodifluoromethane	77	70-130
1,2-Dibromoethane	90	70-130
1,3-Dichloropropane	83	70-130
1,1,1,2-Tetrachloroethane	82	70-130
o-Chlorotoluene	93	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0404519

Continued

Parameter	% Recovery	QC Criteria
Volatile Organics by MCP 8260B LCS for sample(s) 01-03 (WG170023)		
p-Chlorotoluene	96	70-130
Hexachlorobutadiene	106	70-130
1,2,4-Trichlorobenzene	103	70-130
Surrogate(s)		
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130
Dibromofluoromethane	100	70-130
Alkalinity, Total SPIKE for sample(s) 01-02 (L0404515-03, WG169895)		
Alkalinity, Total	96	86-116
Chloride SPIKE for sample(s) 01-02 (L0404519-01, WG169562)		
Chloride	95	58-140
Nitrogen, Nitrate SPIKE for sample(s) 01-02 (L0404519-01, WG169434)		
Nitrogen, Nitrate	92	83-120
Sulfate SPIKE for sample(s) 01-02 (L0404387-02, WG169919)		
Sulfate	108	55-147

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0404519

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by MCP 8260B for sample(s) 01-03 (L0404519-01, WG170023)					
Methylene chloride	95	90	5	20	70-130
1,1-Dichloroethane	110	103	7	20	70-130
Chloroform	93	88	6	20	70-130
Carbon tetrachloride	101	94	7	20	70-130
1,2-Dichloropropane	100	94	6	20	70-130
Dibromochloromethane	79	80	2	20	70-130
1,1,2-Trichloroethane	82	83	1	20	70-130
Tetrachloroethene	86	81	7	20	70-130
Chlorobenzene	94	90	4	20	70-130
1,2-Dichloroethane	92	90	3	20	70-130
1,1,1-Trichloroethane	101	94	7	20	70-130
Bromodichloromethane	92	89	3	20	70-130
trans-1,3-Dichloropropene	75	74	1	20	70-130
cis-1,3-Dichloropropene	89	88	0	20	70-130
Bromoform	77	80	3	20	70-130
1,1,2,2-Tetrachloroethane	91	95	4	20	70-130
Chloromethane	101	95	6	20	70-130
Vinyl chloride	104	94	10	20	70-130
Chloroethane	103	96	7	20	70-130
1,1-Dichloroethene	94	85	10	20	70-130
trans-1,2-Dichloroethene	99	90	9	20	70-130
Trichloroethene	0	0	NC	20	70-130
1,2-Dichlorobenzene	92	89	4	20	70-130
1,3-Dichlorobenzene	96	91	5	20	70-130
1,4-Dichlorobenzene	96	90	6	20	70-130
cis-1,2-Dichloroethene	49	36	31	20	70-130
Dichlorodifluoromethane	107	96	11	20	70-130
1,2-Dibromoethane	91	89	2	20	70-130
1,3-Dichloropropane	82	84	2	20	70-130
1,1,1,2-Tetrachloroethane	86	82	5	20	70-130
o-Chlorotoluene	100	94	6	20	70-130
p-Chlorotoluene	100	95	5	20	70-130
Hexachlorobutadiene	112	108	4	20	70-130
1,2,4-Trichlorobenzene	106	111	5	20	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	97	96	1		70-130
Toluene-d8	100	98	2		70-130
4-Bromofluorobenzene	102	103	1		70-130
Dibromofluoromethane	100	97	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0404519

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02 (WG169895-1)								
Alkalinity, Total	ND	mg CaCO3/L	2.0	30	2320B		0506 16:17	ED
Blank Analysis for sample(s) 01-02 (WG169562-2)								
Chloride	ND	mg/l	1.0	1	9251		0503 20:40	DD
Blank Analysis for sample(s) 01-02 (WG169434-2)								
Nitrogen, Nitrate	ND	mg/l	0.10	30	4500NO3-F		0430 22:09	DD
Blank Analysis for sample(s) 01-02 (WG169919-1)								
Sulfate	ND	mg/l	10.	1	9038		0506 16:50	JT
Blank Analysis for sample(s) 01-02 (WG169601-1)								
Dissolved Metals								
Arsenic, Dissolved	ND	mg/l	0.005	54	6010B	0503 13:00	0504 14:22	MG
Iron, Dissolved	ND	mg/l	0.05	54	6010B	0503 13:00	0504 14:22	MG
Manganese, Dissolved	ND	mg/l	0.01	54	6010B	0503 13:00	0504 14:22	MG
Blank Analysis for sample(s) 01-03 (WG170023-4)								
Volatile Organics by MCP 8260B				54	8260B		0506 17:06	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					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0404519

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-03 (WG170023-4)							
Volatile Organics by MCP 8260B continued				54 8260B		0506 17:06	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	98.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	121.	%	70-130				
Dibromofluoromethane	99.0	%	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.

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: L0404519

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0404519-01A	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-01B	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-01C	Plastic 250ml HNO3 preserved	C	<2	5.7 C	Y	Absent	AS-SI, FE-SI, MN-SI
L0404519-01D	Plastic 250ml HNO3 preserved	C	<2	5.7 C	Y	Absent	AS-SI, FE-SI, MN-SI
L0404519-01E	Plastic 250ml unpreserved	C	7	5.7 C	Y	Absent	ALK-T-2320, CL-9251, NO3-4500, SO4-9038
L0404519-01F	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-01G	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-02A	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-02B	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260
L0404519-02C	Plastic 250ml HNO3 preserved	C	<2	5.7 C	Y	Absent	AS-SI, FE-SI, MN-SI
L0404519-02D	Plastic 250ml HNO3 preserved	C	<2	5.7 C	Y	Absent	AS-SI, FE-SI, MN-SI
L0404519-02E	Plastic 250ml unpreserved	C	7	5.7 C	Y	Absent	ALK-T-2320, CL-9251, NO3-4500, SO4-9038
L0404519-03A	Vial HCl preserved	C	NA	5.7 C	Y	Absent	MCP-8260

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/30/04

ALPHA Job #: L0404519

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

Client Information

Client: ERM

Address: 399 Boylston St. 6th Flr.
Boston, MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: Theresa.Kennedy@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon - Wayland

Project Location: Wayland, MA

Project #: 0013606.03.02

Project Manager: Jeremy Picard

ALPHA Quote #:

Turn-Around Time

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

Date Due: 5/7/04 Time:

Other Project Specific Requirements/Comments/Detection Limits:

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?

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	Collection Time	Sample Matrix	Sampler's Initials	8021B: CVOC	Dissolved As	Diss. Fe, Mn	Cl, SO4, NO3, Alk	Diss Gases: Methane, Ethene, Ethane	TOTAL # BOTTLES	Sample Specific Comments
04519.1	MW-267S	4/30/04	1330	GW	MH	2	1	1	1	2	7	
1	MW-267S MS/MSD	4/30/04	1330	GW	MH	2					2	* Field filtered with 0.45 micron filters
2	MW-267M	4/30/04	1215	GW	MH	2	1	1	1	2	7	
	~~MW-208S~~	~~4/30/04~~	~~1100~~	~~GW~~	~~MH~~ (MH)							
	MW-208M	4/30/04	0920	GW	MH (MH)					1 (MH)		
	~~DUP-10~~	~~4/30/04~~	~~2400~~	~~GW~~	~~MH~~ (MH)							
3	TB	4/29/04	1140	GW	IB	1					1	

Container Type	V	P	P	P	V		P
Preservative	B	C	C	A	B		A

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
	4/30/04 1730		4/30 17:37
	4/30/04 1435		4/30 21 1947

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-G 07-03SM