

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:** L0307451  
**Address:** 399 Boylston Street  
6th Floor  
Boston, MA 02116 **Date Received:** 29-JUL-2003  
**Attn:** Mr. Tim Pac **Date Reported:** 05-AUG-2003  
**Project Number:** 1922.09 **Delivery Method:** Alpha  
**Site:** RAYTHEON

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ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0307451-01	MW-101	WAYLAND, MA
L0307451-02	MW-102	WAYLAND, MA
L0307451-03	MW-103	WAYLAND, MA
L0307451-04	MW-213	WAYLAND, MA
L0307451-05	MW-214	WAYLAND, MA
L0307451-06	MW-44S	WAYLAND, MA
L0307451-07	MW-44M	WAYLAND, MA
L0307451-08	MW-44D	WAYLAND, MA
L0307451-09	MW-212	WAYLAND, MA
L0307451-10	MW-212M	WAYLAND, MA
L0307451-11	DUP-1	WAYLAND, MA
L0307451-12	TB	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.

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Authorized by: Scott McLean

Scott McLean - Technical Director  
This document electronically signed



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-01  
MW-101

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 02:11 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	84.0	%	70-130				

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-02  
MW-102

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731	03:03 MM
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	87.0	%		70-130			

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-03  
MW-103

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 03:56 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	88.0	%	70-130				

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-04  
MW-213

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0730	23:33 MM
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	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: L0307451-05		Date Collected: 29-JUL-2003 13:35
	MW-214	Date Received : 29-JUL-2003
Sample Matrix: WATER		Date Reported : 05-AUG-2003
Condition of Sample: Satisfactory		Field Prep: Field Filtered
Number & Type of Containers: 2-Plastic,2-Vial		

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Chloride	91.	mg/l	1.0	1 9251		0731 18:55	DD
Chromium, Hexavalent	ND	mg/l	0.02	1 7196A	0729 18:35	0729 18:35	JT
Dissolved Metals							
Chromium, Dissolved	ND	mg/l	0.01	1 6010B		0731 12:54	RW
Manganese, Dissolved	0.46	mg/l	0.01	1 6010B		0731 12:54	RW
Sodium, Dissolved	60.	mg/l	10.	1 6010B		0731 14:47	RW
Volatile Organics by GC 8021							
Bromodichloromethane	ND	ug/l	0.50	1 8021B		0731 00:25	MM
Bromoform	ND	ug/l	0.50				
Carbon tetrachloride	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Dibromochloromethane	ND	ug/l	5.0				
Bromomethane/Chloroethane	ND	ug/l	5.0				
Chloroform	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	0.50				
1,3-Dichlorobenzene	ND	ug/l	0.50				
1,4-Dichlorobenzene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1-Dichloroethene	1.1	ug/l	0.50				
cis-1,2-Dichloroethene	1.2	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
Methylene chloride	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Tetrachloroethene	0.68	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.50				
Trichloroethene	30.	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	0.50				
2-Chloroethylvinyl ether	ND	ug/l	5.0				
Chloromethane	ND	ug/l	5.0				

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

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-05  
MW-214

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 00:25 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	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

<b>Laboratory Sample Number:</b> L0307451-06	<b>Date Collected:</b> 29-JUL-2003 11:00
	<b>Date Received :</b> 29-JUL-2003
<b>Sample Matrix:</b> MW-44S WATER	<b>Date Reported :</b> 05-AUG-2003
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> Field Filtered
<b>Number &amp; Type of Containers:</b> 2-Plastic,2-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Chloride	71.	mg/l	1.0	1 9251		0731 18:56	DD
Chromium, Hexavalent	ND	mg/l	0.02	1 7196A	0729 18:35	0729 18:35	JT
<b>Dissolved Metals</b>							
Chromium, Dissolved	ND	mg/l	0.01	1 6010B		0731 12:58	RW
Manganese, Dissolved	0.02	mg/l	0.01	1 6010B		0731 12:58	RW
Sodium, Dissolved	62.	mg/l	10.	1 6010B		0731 14:54	RW
<b>Volatile Organics by GC 8021</b>							
Bromodichloromethane	ND	ug/l	0.50	1 8021B		0731 14:01	MM
Bromoform	ND	ug/l	0.50				
Carbon tetrachloride	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Dibromochloromethane	ND	ug/l	5.0				
Bromomethane/Chloroethane	ND	ug/l	5.0				
Chloroform	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	0.50				
1,3-Dichlorobenzene	ND	ug/l	0.50				
1,4-Dichlorobenzene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1-Dichloroethene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
Methylene chloride	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Tetrachloroethene	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.50				
Trichloroethene	0.78	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	0.50				
2-Chloroethylvinyl ether	ND	ug/l	5.0				
Chloromethane	ND	ug/l	5.0				

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

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-06  
MW-44S

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 14:01 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	101.	%	70-130				

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-07  
MW-44M

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 14:53 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	100.	%		70-130			

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-08  
MW-44D

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 11:02 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	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: L0307451-09		Date Collected: 29-JUL-2003 13:50
	MW-212	Date Received : 29-JUL-2003
Sample Matrix: WATER		Date Reported : 05-AUG-2003
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 GC 8021				1 8021B	0731 15:46	MM
Bromodichloromethane	ND	ug/l	0.50			
Bromoform	ND	ug/l	0.50			
Carbon tetrachloride	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Dibromochloromethane	ND	ug/l	5.0			
Bromomethane/Chloroethane	ND	ug/l	5.0			
Chloroform	ND	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	0.50			
1,3-Dichlorobenzene	ND	ug/l	0.50			
1,4-Dichlorobenzene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1-Dichloroethene	ND	ug/l	0.50			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
Methylene chloride	ND	ug/l	5.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Tetrachloroethene	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.50			
Trichloroethene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	0.50			
2-Chloroethylvinyl ether	ND	ug/l	5.0			
Chloromethane	ND	ug/l	5.0			
Vinyl Chloride	ND	ug/l	2.0			
Surrogate(s)	Recovery		QC Criteria			
4-Bromochlorobenzene	102.	%	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:	L0307451-10	Date Collected:	29-JUL-2003 13:35
	MW-212M	Date Received :	29-JUL-2003
Sample Matrix:	WATER	Date Reported :	05-AUG-2003
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 GC 8021				1 8021B	0731 16:38	MM
Bromodichloromethane	1.3	ug/l	0.50			
Bromoform	ND	ug/l	0.50			
Carbon tetrachloride	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Dibromochloromethane	ND	ug/l	5.0			
Bromomethane/Chloroethane	ND	ug/l	5.0			
Chloroform	2.0	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	0.50			
1,3-Dichlorobenzene	ND	ug/l	0.50			
1,4-Dichlorobenzene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1-Dichloroethene	ND	ug/l	0.50			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
Methylene chloride	ND	ug/l	5.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Tetrachloroethene	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.50			
Trichloroethene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	0.50			
2-Chloroethylvinyl ether	ND	ug/l	5.0			
Chloromethane	ND	ug/l	5.0			
Vinyl Chloride	ND	ug/l	2.0			
Surrogate(s)	Recovery		QC Criteria			
4-Bromochlorobenzene	96.0	%	70-130			

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



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

Laboratory Sample Number: L0307451-11  
DUP-1

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021 continued				1	8021B	0731 17:30 MM	
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	83.0	%		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

<b>Laboratory Sample Number:</b> L0307451-12	<b>Date Collected:</b> 22-JUL-2003 13:10
	<b>Date Received :</b> 29-JUL-2003
<b>Sample Matrix:</b> TB WATER	<b>Date Reported :</b> 05-AUG-2003
<b>Condition of Sample:</b> Satisfactory	<b>Field Prep:</b> None
<b>Number &amp; Type of Containers:</b> 1-Vial	

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Volatile Organics by GC 8021				1	8021B	0731 18:23 MM	
Bromodichloromethane	ND	ug/l	0.50				
Bromoform	ND	ug/l	0.50				
Carbon tetrachloride	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Dibromochloromethane	ND	ug/l	5.0				
Bromomethane/Chloroethane	ND	ug/l	5.0				
Chloroform	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	0.50				
1,3-Dichlorobenzene	ND	ug/l	0.50				
1,4-Dichlorobenzene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1-Dichloroethene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
Methylene chloride	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Tetrachloroethene	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.50				
Trichloroethene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	0.50				
2-Chloroethylvinyl ether	ND	ug/l	5.0				
Chloromethane	ND	ug/l	5.0				
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery		QC Criteria				
4-Bromochlorobenzene	91.0	%	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: L0307451

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
Chloride for sample(s) 01-08,11 (L0307451-08, WG146614)					
Chloride	57.	57.	mg/l	0	
Chromium, Hexavalent for sample(s) 01-08,11 (L0307451-08, WG146423)					
Chromium, Hexavalent	ND	ND	mg/l	NC	
Dissolved Metals for sample(s) 01-08,11 (L0307425-01, WG146455)					
Chromium, Dissolved	ND	ND	mg/l	NC	20
Manganese, Dissolved	4.7	0.02	mg/l	4	20
Sodium, Dissolved	44.	18.	mg/l	0	20

**ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0307451

Parameter	% Recovery	QC Criteria
Chloride LCS for sample(s) 01-08,11 (WG146614)		
Chloride	100	
Chromium, Hexavalent LCS for sample(s) 01-08,11 (WG146423)		
Chromium, Hexavalent	98	
Volatile Organics by GC 8021 LCS for sample(s) 01-05 (WG146293)		
Chlorobenzene	111	70-130
1,1-Dichloroethene	109	70-130
Trichloroethene	102	70-130
Surrogate(s)		
4-Bromochlorobenzene	91	70-130
Volatile Organics by GC 8021 LCS for sample(s) 11-12 (WG146293)		
Chlorobenzene	115	70-130
1,1-Dichloroethene	108	70-130
Trichloroethene	111	70-130
Surrogate(s)		
4-Bromochlorobenzene	115	70-130
Volatile Organics by GC 8021 LCS for sample(s) 06-10 (WG146717)		
Chlorobenzene	115	70-130
1,1-Dichloroethene	108	70-130
Trichloroethene	111	70-130
Surrogate(s)		
4-Bromochlorobenzene	115	70-130
Chloride SPIKE for sample(s) 01-08,11 (L0307451-08, WG146614)		
Chloride	85	
Chromium, Hexavalent SPIKE for sample(s) 01-08,11 (L0307451-08, WG146423)		
Chromium, Hexavalent	93	
Dissolved Metals SPIKE for sample(s) 01-08,11 (L0307425-02, WG146455)		
Chromium, Dissolved	100	75-125
Manganese, Dissolved	84	75-125
Sodium, Dissolved	110	75-125

ALPHA ANALYTICAL LABORATORIES  
 QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0307451

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by GC 8021 for sample(s) 01-05,11-12 (L0307246-01, WG146293)					
Chlorobenzene	96	105	9	20	70-130
1,1-Dichloroethene	105	111	6	20	70-130
Trichloroethene	97	102	6	20	70-130
Surrogate(s)					
4-Bromochlorobenzene	95	96	1		70-130
Volatile Organics by GC 8021 for sample(s) 06-10 (L0307451-08, WG146717)					
Chlorobenzene	111	108	3	20	70-130
1,1-Dichloroethene	111	107	4	20	70-130
Trichloroethene	105	99	6	20	70-130
Surrogate(s)					
4-Bromochlorobenzene	113	109	4		70-130

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0307451

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP      ANAL	ID
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Blank Analysis for sample(s) 01-08,11 (WG146614-2)

Chloride	ND	mg/l	1.0	1 9251	0731 17:53	DD
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Blank Analysis for sample(s) 01-08,11 (WG146423-1)

Chromium, Hexavalent	ND	mg/l	0.02	1 7196A	0729 18:35	0729 18:35 JT
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Blank Analysis for sample(s) 01-05 (WG146293-12)

Volatile Organics by GC 8021				1 8021B	0730 22:41	MM
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Bromodichloromethane	ND	ug/l	0.50			
Bromoform	ND	ug/l	0.50			
Carbon tetrachloride	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			
Dibromochloromethane	ND	ug/l	5.0			
Bromomethane/Chloroethane	ND	ug/l	5.0			
Chloroform	ND	ug/l	0.50			
1,2-Dichlorobenzene	ND	ug/l	0.50			
1,3-Dichlorobenzene	ND	ug/l	0.50			
1,4-Dichlorobenzene	ND	ug/l	0.50			
Dichlorodifluoromethane	ND	ug/l	5.0			
1,1-Dichloroethane	ND	ug/l	0.50			
1,2-Dichloroethane	ND	ug/l	0.50			
1,1-Dichloroethene	ND	ug/l	0.50			
cis-1,2-Dichloroethene	ND	ug/l	0.50			
trans-1,2-Dichloroethene	ND	ug/l	0.50			
1,2-Dichloropropane	ND	ug/l	0.50			
cis-1,3-Dichloropropene	ND	ug/l	0.50			
trans-1,3-Dichloropropene	ND	ug/l	0.50			
Methylene chloride	ND	ug/l	5.0			
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50			
Tetrachloroethene	ND	ug/l	0.50			
1,1,1-Trichloroethane	ND	ug/l	0.50			
1,1,2-Trichloroethane	ND	ug/l	0.50			
Trichloroethene	ND	ug/l	0.50			
Trichlorofluoromethane	ND	ug/l	0.50			
2-Chloroethylvinyl ether	ND	ug/l	5.0			
Chloromethane	ND	ug/l	5.0			
Vinyl Chloride	ND	ug/l	2.0			

Surrogate(s)	Recovery			QC Criteria		
4-Bromochlorobenzene	99.0	%		70-130		

Blank Analysis for sample(s) 11-12 (WG146293-14)

Volatile Organics by GC 8021				1 8021B	0731 09:03	MM
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Bromodichloromethane	ND	ug/l	0.50			
Bromoform	ND	ug/l	0.50			
Carbon tetrachloride	ND	ug/l	0.50			
Chlorobenzene	ND	ug/l	0.50			

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0307451

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 11-12 (WG146293-14)							
Volatile Organics by GC 8021 continued				1	8021B	0731 09:03 MM	
Dibromochloromethane	ND	ug/l	5.0				
Bromomethane/Chloroethane	ND	ug/l	5.0				
Chloroform	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	0.50				
1,3-Dichlorobenzene	ND	ug/l	0.50				
1,4-Dichlorobenzene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1-Dichloroethene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
Methylene chloride	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Tetrachloroethene	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.50				
Trichloroethene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	0.50				
2-Chloroethylvinyl ether	ND	ug/l	5.0				
Chloromethane	ND	ug/l	5.0				
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery		QC Criteria				
4-Bromochlorobenzene	99.0	%	70-130				
Blank Analysis for sample(s) 06-10 (WG146717-4)							
Volatile Organics by GC 8021				1	8021B	0731 09:03 MM	
Bromodichloromethane	ND	ug/l	0.50				
Bromoform	ND	ug/l	0.50				
Carbon tetrachloride	ND	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
Dibromochloromethane	ND	ug/l	5.0				
Bromomethane/Chloroethane	ND	ug/l	5.0				
Chloroform	ND	ug/l	0.50				
1,2-Dichlorobenzene	ND	ug/l	0.50				
1,3-Dichlorobenzene	ND	ug/l	0.50				
1,4-Dichlorobenzene	ND	ug/l	0.50				
Dichlorodifluoromethane	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1-Dichloroethene	ND	ug/l	0.50				
cis-1,2-Dichloroethene	ND	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.50				

ALPHA ANALYTICAL LABORATORIES  
 QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0307451

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE		ID
					PREP	ANAL	
Blank Analysis for sample(s) 06-10 (WG146717-4)							
Volatile Organics by GC 8021 continued				1	8021B	0731 09:03 MM	
1,2-Dichloropropane	ND	ug/l	0.50				
cis-1,3-Dichloropropene	ND	ug/l	0.50				
trans-1,3-Dichloropropene	ND	ug/l	0.50				
Methylene chloride	ND	ug/l	5.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50				
Tetrachloroethene	ND	ug/l	0.50				
1,1,1-Trichloroethane	ND	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.50				
Trichloroethene	ND	ug/l	0.50				
Trichlorofluoromethane	ND	ug/l	0.50				
2-Chloroethylvinyl ether	ND	ug/l	5.0				
Chloromethane	ND	ug/l	5.0				
Vinyl Chloride	ND	ug/l	2.0				
Surrogate(s)	Recovery			QC Criteria			
4-Bromochlorobenzene	99.0	%		70-130			

**ALPHA ANALYTICAL LABORATORIES  
ADDENDUM I**

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**REFERENCES**

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Update III, 1997.

**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.



