NOTICE OF INTENT (NOI)
TEMPORARY CONSTRUCTION DEWATERING AND ABATEMENT WATER DISCHARGE
MASSACHUSETTS MENTAL HEALTH CENTER REDEVELOPMENT
74 FENWOOD ROAD BUILDING AND 20 VINING STREET
BOSTON, MASSACHUSETTS

by

Haley & Aldrich, Inc.
Boston, Massachusetts

for

US Environmental Protection Agency
Boston, Massachusetts

File No. 35198-016
December 2010

HALEY & ALDRICH

APPENDIX G

Laboratory Data Reports

ANALYTICAL REPORT

Lab Number:	L1008026
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Mark Balfe
Phone:	(617) 886-7304
Project Name:	MMHC
Project Number:	35198-020
Report Date:	06/02/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1008026-01	UST-2 (OW)	Not Specified	05/27/10 15:05

Project Name: MMHC **Lab Number:** L1008026
Project Number: 35198-020 **Report Date:** 06/02/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Report Submission

This report contains the results for sample "UST-2 (OW)". The results for all other samples will be issued under separate cover.

Sample Receipt

The sample was inappropriately preserved for the EPA 624 and EPA 504.1 analyses. The results are reported at the client's request.

A container for the TPH-1664 analysis was received but not listed on the Chain of Custody. The analysis was performed at the client's request.

Metals

L1008026-01 has elevated detection limits for all analytes except for Iron and Mercury due to the dilution

Project Name:	MMHC	**Lab Number:**	L1008026
Project Number:	35198-020	**Report Date:**	06/02/10

Case Narrative (continued)

required by the high concentrations of non-target analytes. The requested reporting limits were not achieved.

Solids, Total Suspended

WG415366: A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 06/02/10

ORGANICS

VOLATILES

Project Name: MMHC
Project Number: 35198-020
Lab Number: L1008026
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID:	L1008026-01	Date Collected:	05/27/10 15:05
Client ID:	UST-2 (OW)	Date Received:	05/27/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	06/02/10 11:00
Analytical Date:	06/02/10 12:54		
Analyst:	SS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.011	--	1

Project Name: MMHC
Project Number: 35198-020
Lab Number: L1008026
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID: L1008026-01
Client ID: UST-2 (OW)
Sample Location: Not Specified
Matrix: Water
Analytical Method: 5,624
Analytical Date: 05/28/10 15:27
Analyst: TT

Date Collected: 05/27/10 15:05
Date Received: 05/27/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	10	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	2.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008026-01 Date Collected: 05/27/10 15:05

Client ID: UST-2 (OW) Date Received: 05/27/10

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	10	--	1
Vinyl acetate	ND		ug/l	20	--	1
4-Methyl-2-pentanone	ND		ug/l	10	--	1
2-Hexanone	ND		ug/l	10	--	1
Acrolein	ND		ug/l	8.0	--	1
Acrylonitrile	ND		ug/l	10	--	1
Methyl tert butyl ether	ND		ug/l	20	--	1
Dibromomethane	ND		ug/l	1.0	--	1
1,4-Dioxane	ND		ug/l	2000	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	99		80-120
Fluorobenzene	101		80-120
4-Bromofluorobenzene	104		80-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 05/28/10 07:27
Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415035-2					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	10	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	2.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 05/28/10 07:27
Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415035-2					
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	10	--
Vinyl acetate	ND		ug/l	20	--
4-Methyl-2-pentanone	ND		ug/l	10	--
2-Hexanone	ND		ug/l	10	--
Acrolein	ND		ug/l	8.0	--
Acrylonitrile	ND		ug/l	10	--
Methyl tert butyl ether	ND		ug/l	20	--
Dibromomethane	ND		ug/l	1.0	--
1,4-Dioxane	ND		ug/l	2000	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	105		80-120
Fluorobenzene	107		80-120
4-Bromofluorobenzene	104		80-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 06/02/10 12:05
Analyst: SS

Extraction Date: 06/02/10 11:00

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG415696-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415035-1								
Methylene chloride	98		-		1-221	-		30
1,1-Dichloroethane	99		-		59-155	-		30
Chloroform	102		-		51-138	-		30
Carbon tetrachloride	101		-		70-140	-		30
1,2-Dichloropropane	100		-		1-210	-		30
Dibromochloromethane	101		-		53-149	-		30
1,1,2-Trichloroethane	102		-		52-150	-		30
2-Chloroethylvinyl ether	100		-		1-305	-		30
Tetrachloroethene	108		-		64-148	-		30
Chlorobenzene	105		-		37-160	-		30
Trichlorofluoromethane	95		-		17-181	-		30
1,2-Dichloroethane	100		-		49-155	-		30
1,1,1-Trichloroethane	98		-		52-162	-		30
Bromodichloromethane	102		-		35-155	-		30
trans-1,3-Dichloropropene	96		-		17-183	-		30
cis-1,3-Dichloropropene	99		-		1-227	-		30
Bromoform	100		-		45-169	-		30
1,1,2,2-Tetrachloroethane	101		-		46-157	-		30
Benzene	102		-		37-151	-		30
Toluene	106		-		47-150	-		30
Ethylbenzene	109		-		37-162	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415035-1								
Chloromethane	82		-		1-273	-		30
Bromomethane	116		-		1-242	-		30
Vinyl chloride	85		-		1-251	-		30
Chloroethane	95		-		14-230	-		30
1,1-Dichloroethene	94		-		1-234	-		30
trans-1,2-Dichloroethene	104		-		54-156	-		30
cis-1,2-Dichloroethene	103		-		60-140	-		30
Trichloroethene	104		-		71-157	-		30
1,2-Dichlorobenzene	102		-		18-190	-		30
1,3-Dichlorobenzene	102		-		59-156	-		30
1,4-Dichlorobenzene	104		-		18-190	-		30
p/m-Xylene	104		-		40-160	-		30
o-Xylene	103		-		40-160	-		30
XYLENE (TOTAL)	104		-		40-160	-		30
Styrene	102		-		40-160	-		30
Acetone	105		-		40-160	-		30
Carbon disulfide	104		-		40-160	-		30
2-Butanone	101		-		40-160	-		30
Vinyl acetate	87		-		40-160	-		30
4-Methyl-2-pentanone	99		-		40-160	-		30
2-Hexanone	95		-		40-160	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415035-1								
Acrolein	95		-		40-160	-		30
Acrylonitrile	83		-		40-160	-		30
Dibromomethane	101		-		70-130	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	105				80-120
Fluorobenzene	103				80-120
4-Bromofluorobenzene	102				80-120

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG415696-2								
1,2-Dibromoethane	102		-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-3 QC Sample: L1007939-04 Client ID: MS Sample												
Methylene chloride	ND	20	19	95		-	-		1-221	-		30
1,1-Dichloroethane	ND	20	20	101		-	-		59-155	-		30
Chloroform	ND	20	20	99		-	-		51-138	-		30
Carbon tetrachloride	ND	20	22	113		-	-		70-140	-		30
1,2-Dichloropropane	ND	20	20	98		-	-		1-210	-		30
Dibromochloromethane	ND	20	21	103		-	-		53-149	-		30
1,1,2-Trichloroethane	ND	20	20	101		-	-		52-150	-		30
2-Chloroethylvinyl ether	ND	20	20	102		-	-		1-305	-		30
Tetrachloroethene	ND	20	22	108		-	-		64-148	-		30
Chlorobenzene	ND	20	20	99		-	-		37-160	-		30
Trichlorofluoromethane	ND	20	19	94		-	-		17-181	-		30
1,2-Dichloroethane	ND	20	20	100		-	-		49-155	-		30
1,1,1-Trichloroethane	ND	20	21	105		-	-		52-162	-		30
Bromodichloromethane	ND	20	21	104		-	-		35-155	-		30
trans-1,3-Dichloropropene	ND	20	20	101		-	-		17-183	-		30
cis-1,3-Dichloropropene	ND	20	19	95		-	-		1-227	-		30
Bromoform	ND	20	20	101		-	-		45-169	-		30
1,1,2,2-Tetrachloroethane	ND	20	20	101		-	-		46-157	-		30
Benzene	ND	20	20	100		-	-		35-151	-		30
Toluene	ND	20	20	102		-	-		47-150	-		30
Ethylbenzene	ND	20	21	106		-	-		37-162	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-3 QC Sample: L1007939-04 Client ID: MS Sample												
Chloromethane	ND	20	15	76		-	-		1-273	-		30
Bromomethane	ND	20	17	87		-	-		1-242	-		30
Vinyl chloride	ND	20	19	94		-	-		1-251	-		30
Chloroethane	ND	20	18	88		-	-		14-230	-		30
1,1-Dichloroethene	ND	20	19	97		-	-		1-234	-		30
trans-1,2-Dichloroethene	ND	20	20	103		-	-		54-156	-		30
cis-1,2-Dichloroethene	ND	20	19	97		-	-		60-140	-		30
Trichloroethene	ND	20	20	102		-	-		71-157	-		30
1,2-Dichlorobenzene	ND	20	19	96		-	-		18-190	-		30
1,3-Dichlorobenzene	ND	20	20	98		-	-		59-156	-		30
1,4-Dichlorobenzene	ND	20	19	98		-	-		18-190	-		30
p/m-Xylene	ND	40	40	101		-	-		40-160	-		30
o-Xylene	ND	20	20	99		-	-		40-160	-		30
XYLENE (TOTAL)	ND	60	60	101		-	-		40-160	-		30
Styrene	ND	20	19	94		-	-		40-160	-		30
Acetone	ND	50	47	94		-	-		40-160	-		30
Carbon disulfide	ND	20	20	101		-	-		40-160	-		30
2-Butanone	ND	50	48	96		-	-		40-160	-		30
Vinyl acetate	ND	40	32	80		-	-		40-160	-		30
4-Methyl-2-pentanone	ND	50	46	92		-	-		40-160	-		30
2-Hexanone	ND	50	45	91		-	-		40-160	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-3 QC Sample: L1007939-04 Client ID: MS Sample												
Acrolein	ND	40	ND	**0**	Q	-	-		40-160	-		30
Acrylonitrile	ND	40	39	99		-	-		40-160	-		30
Dibromomethane	ND	20	20	100		-	-			-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	101				80-120
Fluorobenzene	101				80-120
Pentafluorobenzene	99				80-120

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415696-3 QC Sample: L1008028-01 Client ID: MS Sample												
1,2-Dibromoethane	ND	0.251	0.252	100		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-4 QC Sample: L1007939-04 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-4 QC Sample: L1007939-04 Client ID: DUP Sample					
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene	ND	ND	ug/l	NC	30
o-xylene	ND	ND	ug/l	NC	30
Xylene (Total)	ND	ND	ug/l	NC	30
Styrene	ND	ND	ug/l	NC	30
Acetone	ND	ND	ug/l	NC	30
Carbon disulfide	ND	ND	ug/l	NC	30

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415035-4 QC Sample: L1007939-04 Client ID: DUP Sample					
2-Butanone	ND	ND	ug/l	NC	30
Vinyl acetate	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone	ND	ND	ug/l	NC	30
2-Hexanone	ND	ND	ug/l	NC	30
Acrolein	ND	ND	ug/l	NC	30
Acrylonitrile	ND	ND	ug/l	NC	30
Dibromomethane	ND	ND	ug/l	NC	30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	106		103		80-120
Fluorobenzene	104		103		80-120
4-Bromofluorobenzene	103		101		80-120

SEMIVOLATILES

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008026-01	Date Collected:	05/27/10 15:05
Client ID:	UST-2 (OW)	Date Received:	05/27/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	05/28/10 11:30
Analytical Date:	05/29/10 00:52		
Analyst:	HL		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PAHs by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008026-01	Date Collected:	05/27/10 15:05
Client ID:	UST-2 (OW)	Date Received:	05/27/10
Sample Location:	Not Specified	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PAHs by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	75		33-120

Project Name: MMHC
Project Number: 35198-020
Lab Number: L1008026
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID:	L1008026-01	Date Collected:	05/27/10 15:05
Client ID:	UST-2 (OW)	Date Received:	05/27/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	05/28/10 14:46
Analytical Date:	06/02/10 14:09		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	49	--	1
1,2,4-Trichlorobenzene	ND		ug/l	4.9	--	1
Bis(2-chloroethyl)ether	ND		ug/l	4.9	--	1
1,2-Dichlorobenzene	ND		ug/l	4.9	--	1
1,3-Dichlorobenzene	ND		ug/l	4.9	--	1
1,4-Dichlorobenzene	ND		ug/l	4.9	--	1
3,3'-Dichlorobenzidine	ND		ug/l	49	--	1
2,4-Dinitrotoluene	ND		ug/l	5.9	--	1
2,6-Dinitrotoluene	ND		ug/l	4.9	--	1
Azobenzene	ND		ug/l	4.9	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	4.9	--	1
4-Bromophenyl phenyl ether	ND		ug/l	4.9	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	4.9	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.9	--	1
Hexachlorocyclopentadiene	ND		ug/l	29	--	1
Isophorone	ND		ug/l	4.9	--	1
Nitrobenzene	ND		ug/l	4.9	--	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	4.9	--	1
Butyl benzyl phthalate	ND		ug/l	4.9	--	1
Di-n-butylphthalate	ND		ug/l	4.9	--	1
Di-n-octylphthalate	ND		ug/l	4.9	--	1
Diethyl phthalate	ND		ug/l	4.9	--	1
Dimethyl phthalate	ND		ug/l	4.9	--	1
Aniline	ND		ug/l	20	--	1
4-Chloroaniline	ND		ug/l	4.9	--	1
2-Nitroaniline	ND		ug/l	4.9	--	1
3-Nitroaniline	ND		ug/l	4.9	--	1
4-Nitroaniline	ND		ug/l	6.8	--	1
Dibenzofuran	ND		ug/l	4.9	--	1

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008026-01 Date Collected: 05/27/10 15:05

Client ID: UST-2 (OW) Date Received: 05/27/10

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
n-Nitrosodimethylamine	ND		ug/l	49	--	1
2,4,6-Trichlorophenol	ND		ug/l	4.9	--	1
P-Chloro-M-Cresol	ND		ug/l	4.9	--	1
2-Chlorophenol	ND		ug/l	5.9	--	1
2,4-Dichlorophenol	ND		ug/l	9.8	--	1
2,4-Dimethylphenol	ND		ug/l	9.8	--	1
2-Nitrophenol	ND		ug/l	20	--	1
4-Nitrophenol	ND		ug/l	9.8	--	1
2,4-Dinitrophenol	ND		ug/l	29	--	1
4,6-Dinitro-o-cresol	ND		ug/l	20	--	1
Phenol	ND		ug/l	6.8	--	1
2-Methylphenol	ND		ug/l	5.9	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.9	--	1
2,4,5-Trichlorophenol	ND		ug/l	4.9	--	1
Benzoic Acid	ND		ug/l	49	--	1
Benzyl Alcohol	ND		ug/l	9.8	--	1
Carbazole	ND		ug/l	4.9	--	1
Pyridine	ND		ug/l	49	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	22		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	50		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	52		33-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 06/02/10 10:46
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 05/28/10 14:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415351-1					
Benzidine	ND		ug/l	50	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	5.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
3,3'-Dichlorobenzidine	ND		ug/l	50	--
2,4-Dinitrotoluene	ND		ug/l	6.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	5.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	5.0	--
4-Bromophenyl phenyl ether	ND		ug/l	5.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	30	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	5.0	--
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	20	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	7.0	--
Dibenzofuran	ND		ug/l	5.0	--
n-Nitrosodimethylamine	ND		ug/l	50	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 06/02/10 10:46
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 05/28/10 14:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415351-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
P-Chloro-M-Cresol	ND		ug/l	5.0	--
2-Chlorophenol	ND		ug/l	6.0	--
2,4-Dichlorophenol	ND		ug/l	10	--
2,4-Dimethylphenol	ND		ug/l	10	--
2-Nitrophenol	ND		ug/l	20	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	30	--
4,6-Dinitro-o-cresol	ND		ug/l	20	--
Phenol	ND		ug/l	7.0	--
2-Methylphenol	ND		ug/l	6.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	10	--
Carbazole	ND		ug/l	5.0	--
Pyridine	ND		ug/l	50	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	59		33-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/28/10 22:57
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 05/28/10 11:30

Parameter	Result	Qualifier	Units	RL	MDL
PAHs by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG415352-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 05/28/10 22:57
Analyst: HL

Extraction Method: EPA 3510C
Extraction Date: 05/28/10 11:30

Parameter	Result	Qualifier	Units	RL	MDL
PAHs by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG415352-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	74		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC

Project Number: 35198-020

Lab Number: L1008026

Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415351-2 WG415351-3								
1,2,4-Trichlorobenzene	55		68		39-98	21		30
1,2-Dichlorobenzene	57		66		40-140	15		30
1,4-Dichlorobenzene	59		67		36-97	13		30
2,4-Dinitrotoluene	86		82		24-96	5		30
2,6-Dinitrotoluene	67		77		40-140	14		30
4-Chlorophenyl phenyl ether	71		75		40-140	5		30
n-Nitrosodi-n-propylamine	59		71		41-116	18		30
Butyl benzyl phthalate	89		87		40-140	2		30
P-Chloro-M-Cresol	70		70		23-97	0		30
2-Chlorophenol	65		72		27-123	10		30
2-Nitrophenol	70		73		30-130	4		30
4-Nitrophenol	51		55		10-80	8		30
2,4-Dinitrophenol	59		66		20-130	11		30
Phenol	32		38		12-110	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415351-2 WG415351-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		51		21-120
Phenol-d6	32		33		10-120
Nitrobenzene-d5	69		71		23-120
2-Fluorobiphenyl	65		65		15-120
2,4,6-Tribromophenol	80		79		10-120
4-Terphenyl-d14	79		73		33-120

PAHs by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG415352-2 WG415352-3								
Acenaphthene	69		67		37-111	3		40
2-Chloronaphthalene	103		104		40-140	1		40
Fluoranthene	69		72		40-140	4		40
Anthracene	69		77		40-140	11		40
Pyrene	77		81		40-140	5		40
Pentachlorophenol	72		81		30-130	12		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PAHs by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG415352-2 WG415352-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		50		21-120
Phenol-d6	37		35		10-120
Nitrobenzene-d5	96		84		23-120
2-Fluorobiphenyl	82		80		15-120
2,4,6-Tribromophenol	99		104		10-120
4-Terphenyl-d14	83		88		33-120

PCBS

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008026-01	Date Collected:	05/27/10 15:05
Client ID:	UST-2 (OW)	Date Received:	05/27/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	05/30/10 13:35
Analytical Date:	06/01/10 14:54	Cleanup Method1:	EPA 3665A
Analyst:	JB	Cleanup Date1:	06/01/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.255	--	1
Aroclor 1221	ND		ug/l	0.255	--	1
Aroclor 1232	ND		ug/l	0.255	--	1
Aroclor 1242	ND		ug/l	0.255	--	1
Aroclor 1248	ND		ug/l	0.255	--	1
Aroclor 1254	ND		ug/l	0.255	--	1
Aroclor 1260	ND		ug/l	0.255	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	81		30-150	A

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 06/01/10 13:10
Analyst: JB

Extraction Method: EPA 608
Extraction Date: 05/30/10 13:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/01/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/01/10

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG415320-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	68		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415320-3 QC Sample: L1007969-01 Client ID: MS Sample												
Aroclor 1016	ND	2	1.67	84		-	-		40-126	-		30
Aroclor 1260	ND	2	1.42	71		-	-		40-127	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	*Column*
2,4,5,6-Tetrachloro-m-xylene	59				30-150	A
Decachlorobiphenyl	62				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC

Project Number: 35198-020

Lab Number: L1008026

Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG415320-2								
Aroclor 1016	84		-		40-126	-		30
Aroclor 1260	66		-		40-127	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50				30-150	A
Decachlorobiphenyl	78				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415320-4 QC Sample: L1007969-01 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		30
Aroclor 1221	ND	ND	ug/l	NC		30
Aroclor 1232	ND	ND	ug/l	NC		30
Aroclor 1242	ND	ND	ug/l	NC		30
Aroclor 1248	ND	ND	ug/l	NC		30
Aroclor 1254	ND	ND	ug/l	NC		30
Aroclor 1260	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		57		30-150	A
Decachlorobiphenyl	59		56		30-150	A

METALS

Project Name: MMHC
Project Number: 35198-020
Lab Number: L1008026
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID: L1008026-01
Client ID: UST-2 (OW)
Sample Location: Not Specified
Matrix: Water
Date Collected: 05/27/10 15:05
Date Received: 05/27/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Arsenic, Total	ND		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Cadmium, Total	ND		mg/l	0.0004	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Chromium, Total	ND		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Copper, Total	0.0017		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Iron, Total	0.07		mg/l	0.05	--	1	06/01/10 15:50	06/02/10 11:33	EPA 3005A	19,200.7	AI
Lead, Total	ND		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	--	1	05/28/10 13:43	06/01/10 12:13	EPA 245.1	3,245.1	EZ
Nickel, Total	0.0049		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Selenium, Total	0.007		mg/l	0.002	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0008	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM
Zinc, Total	ND		mg/l	0.0100	--	2	06/01/10 17:00	06/02/10 16:46	EPA 3005A	1,6020	BM

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415163-1										
Mercury, Total	ND		mg/l	0.0002	--	1	05/28/10 13:43	06/01/10 12:08	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415502-1										
Iron, Total	ND		mg/l	0.05	--	1	06/01/10 15:50	06/02/10 11:27	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415505-1										
Antimony, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Arsenic, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Chromium, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Copper, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Lead, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Nickel, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Selenium, Total	ND		mg/l	0.001	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Zinc, Total	ND		mg/l	0.0050	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415163-2								
Mercury, Total	103		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415502-2								
Iron, Total	96		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415505-2								
Antimony, Total	89		-		80-120	-		
Arsenic, Total	87		-		80-120	-		
Cadmium, Total	99		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Copper, Total	98		-		80-120	-		
Lead, Total	100		-		80-120	-		
Nickel, Total	99		-		80-120	-		
Selenium, Total	90		-		80-120	-		
Silver, Total	96		-		80-120	-		
Zinc, Total	93		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415163-4 QC Sample: L1008026-01 Client ID: UST-2 (OW)												
Mercury, Total	ND	0.001	0.0011	106		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415502-4 QC Sample: L1008026-01 Client ID: UST-2 (OW)												
Iron, Total	0.07	1	1.0	93		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415505-4 QC Sample: L1007904-02 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4300	86		-	-		80-120	-		20
Arsenic, Total	0.0010	0.12	0.1049	86		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0492	96		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1813	91		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2405	96		-	-		80-120	-		20
Lead, Total	ND	0.51	0.4989	98		-	-		80-120	-		20
Nickel, Total	ND	0.5	0.4774	95		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.104	87		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0439	88		-	-		80-120	-		20
Zinc, Total	ND	0.5	0.4557	91		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415163-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415502-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)						
Iron, Total	0.07	0.09	mg/l	16		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415505-3 QC Sample: L1007904-02 Client ID: DUP Sample						
Lead, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID: L1008026-01
Client ID: UST-2 (OW)
Sample Location: Not Specified
Matrix: Water

Date Collected: 05/27/10 15:05
Date Received: 05/27/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	5.3		mg/l	5.0	NA	1	-	06/01/10 08:30	30,2540D	DW
Cyanide, Total	0.016		mg/l	0.005	--	1	05/30/10 13:10	06/02/10 11:42	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/27/10 23:45	30,4500CL-D	BH
TPH	ND		mg/l	4.00	--	1	06/02/10 09:45	06/02/10 16:15	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	--	1	-	06/02/10 14:35	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/28/10 00:10	05/28/10 00:10	30,3500CR-D	DD

Project Name: MMHC **Lab Number:** L1008026

Project Number: 35198-020 **Report Date:** 06/02/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415225-2										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/28/10 00:10	05/28/10 00:10	30,3500CR-D	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415252-2										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/27/10 23:45	30,4500CL-D	BH
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415315-1										
Cyanide, Total	ND		mg/l	0.005	--	1	05/30/10 13:10	06/02/10 11:29	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415366-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/01/10 08:30	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415627-2										
TPH	ND		mg/l	4.00	--	1	06/02/10 09:45	06/02/10 16:15	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415718-1										
Phenolics, Total	ND		mg/l	0.03	--	1	-	06/02/10 14:32	4,420.1	TH

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415225-1								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415252-1								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415315-2								
Cyanide, Total	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415627-1								
TPH	90		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415718-2								
Phenolics, Total	102		-		82-111	-		12

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415225-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)												
Chromium, Hexavalent	ND	0.1	0.100	100		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415315-4 QC Sample: L1007941-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.214	107		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415627-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)												
TPH	ND	20.6	17.1	83		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415718-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)												
Phenolics, Total	ND	0.8	0.79	99		-	-		77-124	-		12

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415225-4 QC Sample: L1008026-01 Client ID: UST-2 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415252-3 QC Sample: L1008026-01 Client ID: UST-2 (OW)						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415315-3 QC Sample: L1007941-01 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415627-4 QC Sample: L1008028-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415718-4 QC Sample: L1008028-01 Client ID: DUP Sample						
Phenolics, Total	ND	ND	mg/l	NC		12

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008026
Report Date: 06/02/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1008026-01A	Plastic 1000ml unpreserved	A	7	3.1	Y	Absent	TSS-2540(7)
L1008026-01B	Plastic 1000ml unpreserved	A	7	3.1	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1008026-01C	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	PAHTCL-SIM(7),8270TCL(7)
L1008026-01D	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	PAHTCL-SIM(7),8270TCL(7)
L1008026-01E	Amber 1000ml Na2S2O3	A	7	3.1	Y	Absent	PCB-608(7)
L1008026-01F	Amber 1000ml Na2S2O3	A	7	3.1	Y	Absent	PCB-608(7)
L1008026-01G	Amber 1000ml HCl preserved	A	<2	3.1	Y	Absent	TPH-1664(28)
L1008026-01H	Amber 1000ml HCl preserved	A	<2	3.1	Y	Absent	TPH-1664(28)
L1008026-01I	Amber 500ml H2SO4preserved	A	<2	3.1	Y	Absent	TPHENOL-420(28)
L1008026-01J	Amber 500ml H2SO4preserved	A	<2	3.1	Y	Absent	TPHENOL-420(28)
L1008026-01K	Plastic 250ml NaOH preserved	A	>12	3.1	Y	Absent	TCN-4500(14)
L1008026-01L	Plastic 250ml HNO3 preserved	A	<2	3.1	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1008026-01M	Vial water preserved	A	N/A	3.1	Y	Absent	504(14)
L1008026-01N	Vial water preserved	A	N/A	3.1	Y	Absent	504(14)
L1008026-01O	Vial water preserved	A	N/A	3.1	Y	Absent	624(7)
L1008026-01P	Vial water preserved	A	N/A	3.1	Y	Absent	624(7)

*Values in parentheses indicate holding time in days

Project Name:	MMHC	**Lab Number:**	L1008026
Project Number:	35198-020	**Report Date:**	06/02/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

Report Format: Data Usability Report

Project Name:	MMHC	**Lab Number:**	L1008026
Project Number:	35198-020	**Report Date:**	06/02/10

Data Qualifiers

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MMHC	**Lab Number:**	L1008026
Project Number:	35198-020	**Report Date:**	06/02/10

REFERENCES

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

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

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

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical 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 shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical 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.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised May 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

L1008026 ALPHA Job # ~~L1007951~~ 5/28/10 TP

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600
Page 1 of 1

H&A FILE NO.	35198-026	LABORATORY	Alpha Analytical Westborough, MA
PROJECT NAME	MMHC	ADDRESS	
H&A CONTACT	K. Alexander	CONTACT	Gina Hall
DELIVERY DATE	5/27/10		
TURNAROUND TIME	3 day		
PROJECT MANAGER	M. Balfe		

Sample No.	Date	Time	Depth	Type	Analysis Requested: (1) VOA	(2) ABNs / PAH only	(3) MCP Metals	(4) Pesticides / PCBs	(5) VPH Full Suite / C-ranges Only	EPH Full Suite / C-ranges Only	(6) TPH (sep)	(7) TCLP (sep)	(8) Reactivity / Ignitability / Corrosivity	(9) (10) (11)	(12) (13)	(14)	Number of Containers
HA10-1(GW)	5/27/10	1108	—	Aq	X	X	X										6
UST-2(GW)	↓	1505		↓				X	X	X	X	X	X	X	X	X	16
Polymeric Sock	~~5/27/10~~	~~1505~~		↓			~~X~~			~~X~~	~~X~~						
														22 pts			

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

(1) VOCs by 8260 (2) VPH < ranges only
(3) EPH w/ TA
(4) TSS 160.2
(5) TRC 330.1
(6) Hexchrome SM3500
(7) TKN 335.2
(8) VOC 624
(9) EDB 504
(10) SVOCs 8270
(11) PAHs 8270-SIM
(12) PCB 608
(13) Total metals: Sb, As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn, Fe
(14) Total phenols 420.1

Sampled and Relinquished by	Received by
Sign Desmond Crawford	Sign
Print Desmond Crawford	Print Wayne Plume
Firm Haley & Aldrich	Firm Alpha
Date 5/27/10 Time 1632	Date 5/27/10 Time 1630
Relinquished by	**Received by**
Sign	Sign
Print Wayne Plume	Print
Firm Alpha	Firm Alpha
Date 5/27/10 Time 1835	Date 5/27/10 Time 1835
Relinquished by	**Received by**
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

LIQUID												
VOA Vial	✓											
Amber Glass												
Plastic Bottle												
Preservative	AF	AF	AF	A	A	A	AF	AH	AH	A	A	
Volume												

SOLID												
VOA Vial												
Amber Glass												
Clear Glass												
Preservative												
Volume												

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

Sampling Comments

Sample UST-2(GW) submitted for NPDES RGP permit application. Please follow appropriate ~~contract~~ testing methods at minimum detection levels as required by the EPA for the RGP

- Flex-Held Sample Polymeric Sock DRB

Call Ken A. w/ questions 617-886-7366

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory

Form 3003 AUGUST 2008

06021018:23

-01

Groundwater Analytical, Inc.
P.O.Box 1200
228 Main Street
Buzzards Bay, MA 02532

Telephone: (508) 759-4441
FAX: (508) 759-4475

GROUNDWATER ANALYTICAL

e-mail

To:	Cindy Campisano	From:	e-mail reporting GWA
	Environmental Health &	Pages:	58
e-mail:	ccampisano@eheinc.com	Date:	05/17/2010 16:57:12
Re:	133105	CC:	

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply

● Comments:

Final Project Report for 16682, Lab ID 133105, Received 05-10-10

Confidential

GROUNDWATER ANALYTICAL

Groundwater Analytical, Inc.
P.O. Box 1200
228 Main Street
Buzzards Bay, MA 02532

Telephone (508) 759-4441
FAX (508) 759-4475
www.groundwateranalytical.com

May 17, 2010

Ms. Cindy Campisano
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

LABORATORY REPORT

Project: **16682**
Lab ID: **133105**
Received: **05-10-10**

Dear Cindy:

Enclosed are the analytical results for the above referenced project. The project was processed for Priority turnaround.

This letter authorizes the release of the analytical results, and should be considered a part of this report. This report contains a sample receipt report detailing the samples received, a project narrative indicating project changes and non-conformances, a quality control report, and a statement of our state certifications.

The analytical results contained in this report meet all applicable NELAC or NVLAP standards, except as may be specifically noted, or described in the project narrative. The analytical results relate only to the samples received. This report may only be used or reproduced in its entirety.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Should you have any questions concerning this report, please do not hesitate to contact me.

Sincerely,

Eric H. Jensen
Operations Manager

EHJ/elm
Enclosures

GROUNDWATER ANALYTICAL

Sample Receipt Report

Project: **16682**
Client: **Environmental Health & Engineering, Inc.**
Lab ID: **133105**

Delivery: **Hand**
Airbill: **n/a**
Lab Receipt: **05-10-10**

Temperature: **2.0ºC**
Chain of Custody: **Present**
Custody Seal(s): **n/a**

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-1	110738		Aqueous	5/10/10 12:00	EPA 8082 PCBs				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213857	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		
C1213856	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-2	110739		Aqueous	5/10/10 12:15	EPA 8270C Semivolatile Organics (Low Level)				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213859	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		
C1213855	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-3	110740		Aqueous	5/10/10 12:30	TPH by GC EPA 8015B Mod				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213850	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		
C1213843	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-4	110741		Aqueous	5/10/10 12:40	EPA 9096 Phenolics				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213842	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-5	110742		Aqueous	5/10/10 12:50	EPA 6010B Ag Cd Cr Cu Fe Ni Zn Total EPA 6020A As Pb Sb Se Total EPA 7470A Mercury by CVAA Total				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1207848	250 mL Plastic	Scientific Specialist	BX36134	HNO3	R-6113E	04-16-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-6	110743		Aqueous	5/10/10 13:10	SM 4500-Cl G Total Residual Chlorine EPA 7196A Hexavalent Chromium SM 2540 D Total Suspended Solids				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1093652	1 L Plastic	Proline	BX30799	None	n/a	n/a	06-10-08		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-7	110746		Aqueous	5/10/10 13:45	EPA 8082 PCBs				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213861	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		
C1213860	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-8	110747		Aqueous	5/10/10 14:00	EPA 8270C Semivolatile Organics (Low Level)				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213865	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		
C1213854	1 L Amber Glass	Scientific Specialist	BX36272	None	n/a	n/a	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-9	110748		Aqueous	5/10/10 14:15	TPH by GC EPA 8015B Mod				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213853	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		
C1213846	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		

GROUNDWATER ANALYTICAL

Sample Receipt Report (Continued)

Project: **16682**
Client: **Environmental Health & Engineering, Inc.**
Lab ID: **133105**

Delivery: **Hand**
Airbill: **n/a**
Lab Receipt: **05-10-10**

Temperature: **2.0ºC**
Chain of Custody: **Present**
Custody Seal(s): **n/a**

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-10	110749		Aqueous	5/10/10 14:15	EPA 9096 Phenolics				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1213847	1 L Amber Glass	Scientific Specialist	BX36271	H2SO4	R-6048D	04-27-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-11	110750		Aqueous	5/10/10 14:40	EPA 6010B Ag Cd Cr Cu Fe Ni Zn Total EPA 6020A As Pb Sb Se Total EPA 7470A Mercury by CVAA Total				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1207866	250 mL Plastic	Scientific Specialist	BX36134	HNO3	R-6113E	04-16-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-12	110751		Aqueous	5/10/10 14:50	SM 4500-Cl G Total Residual Chlorine EPA 7196A Hexavalent Chromium SM 2540 D Total Suspended Solids				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1093628	1 L Plastic	Proline	BX30799	None	n/a	n/a	06-10-08		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-13	110752		Aqueous	5/10/10 14:57	EPA 9012A Total Cyanide				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1233424	250 mL Plastic	Scientific Specialist	BX36141	NaOH	R-6027A	04-26-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-14	110753		Aqueous	5/10/10 13:10	EPA 9012A Total Cyanide				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1233416	250 mL Plastic	Scientific Specialist	BX36141	NaOH	R-6027A	04-26-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-15	110736		Aqueous	5/10/10 13:10	EPA 8260B Volatile Organics with Oxygenates				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1208261	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		
C1208260	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		
C1208259	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-16	110737		Aqueous	5/10/10 13:10	EPA 504.1 EDB and DBCP				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C903787	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		
C903778	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		
C903736	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-17	110744		Aqueous	5/10/10 13:30	EPA 8260B Volatile Organics with Oxygenates				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C1208269	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		
C1208266	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		
C1208258	40 mL VOA Vial	Scientific Specialist	BX35935	HCL	R-5915D	03-23-10	n/a		

GROUNDWATER ANALYTICAL

Sample Receipt Report (Continued)

Project:	**16682**	Delivery:	**Hand**	Temperature:	**2.0ºC**
Client:	**Environmental Health & Engineering, Inc.**	Airbill:	**n/a**	Chain of Custody:	**Present**
Lab ID:	**133105**	Lab Receipt:	**05-10-10**	Custody Seal(s):	**n/a**

Lab ID	Field ID		Matrix	Sampled	Method				Notes
133105-18	110745		Aqueous	5/10/10 13:30	EPA 504.1 EDB and DBCP				
Con ID	**Container**	**Vendor**	**QC Lot**	**Preserv**	**QC Lot**	**Prep**	**Ship**		
C903762	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		
C903746	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		
C903745	40 mL VOA Vial	Proline	BX25490	Na2S2O3	R-4909A	03-29-07	n/a		

GROUNDWATER ANALYTICAL

Data Certification

Project: **16682** Lab ID: **133105**
Client: **Environmental Health & Engineering, Inc.** Received: **05-10-10 18:30**

MA DEP Compendium of Analytical Methods

Project Location: **n/a** MA DEP RTN: **n/a**

This Form provides certifications for the following data set:

EPA 8260B: 133105-15,-17
EPA 8270C: 133105-2,-8
EPA 8082: 133105-1,-7
EPA 6010B: 133105-5,-11
EPA 6020A: 133105-5,-11
EPA 9012A: 133105-13,-14
EPA 7196A: 133105-6,-12

Sample Matrices:	Groundwater (X)	Soil/Sediment ( )	Drinking Water ( )	Other ( )	
MCP SW-846 Methods Used	8260B (X)	8151A ( )	8330 ( )	6010B (X)	7470A/1A ( )
	8270C (X)	8081A ( )	VPH ( )	6020A (X)	9012A[2] (X)
As specified in MA DEP Compendium of Analytical Methods. (check all that apply)	8082 (X)	8021B ( )	EPH ( )	7000 S[3] (X)	Other ( )
	1. List Release Tracking Number (RTN), if known.				
	2. SW-846 Method 9012A (Equivalent to 9014) or MA DEP Physiologically Available Cyanide (PAC) Method				
	3. S - SW-846 Methods 7000 Series. List individual method and analyte.				

An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status.

A.	Were all samples received by the laboratory in a condition consistent with that described on the 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 MA DEP 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?	n/a

A response to questions E and F below is required for "Presumptive Certainty" status.

E.	Were all QC performance standards and recommendations for the specified methods achieved?	No
F.	Were results for all analyte-list compounds/elements for the specified method(s) reported?	Yes

All No answers are addressed in the attached Project 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 analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Position: Operations Manager
Printed Name: Eric H. Jensen Date: 05-17-10

GROUNDWATER ANALYTICAL

EPA Method 8082
Polychlorinated Biphenyls (PCBs) by GC/ECD

Field ID:	**110738**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-01**	QC Batch ID:	**PB-2595-F**
Sampled:	**05-10-10 12:00**	Instrument ID:	**GC-11 Agilent 6890**
Received:	**05-10-10 18:30**	Sample Weight:	**940 mL**
Extracted:	**05-12-10 20:30**	Final Volume:	**10 mL**
Cleaned Up:	**05-13-10 00:30**	Dilution Factor:	**1**
Analyzed:	**05-13-10 16:52**		
Analyst:	**AWG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
12674-11-2	Aroclor 1016	BRL		ug/L	0.2
11104-28-2	Aroclor 1221	BRL		ug/L	0.2
11141-16-5	Aroclor 1232	BRL		ug/L	0.2
53469-21-9	Aroclor 1242	BRL		ug/L	0.2
12672-29-6	Aroclor 1248	BRL		ug/L	0.2
11097-69-1	Aroclor 1254	BRL		ug/L	0.2
11096-82-5	Aroclor 1260	BRL		ug/L	0.2
37324-23-5	Aroclor 1262 †	BRL		ug/L	0.2
11100-14-4	Aroclor 1268 †	BRL		ug/L	0.2

QC Surrogate Compound		Spiked	Measured	Recovery	QC Limits
First	Tetrachloro-*m*-xylene	0.21	0.15	**69** %	30 - 150 %
Column	Decachlorobiphenyl	0.21	0.23	**108** %	30 - 150 %
Second	Tetrachloro-*m*-xylene	0.21	0.15	**72** %	30 - 150 %
Column	Decachlorobiphenyl	0.21	0.25	**116** %	30 - 150 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C. Cleanup performed by EPA Method 3660B and EPA Method 3665A.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

† Non-target analyte. Result is based on a single mid-range calibration standard.

GROUNDWATER ANALYTICAL

EPA Method 8082
Polychlorinated Biphenyls (PCBs) by GC/ECD

Field ID:	**110746**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-07**	QC Batch ID:	**PB-2595-F**
Sampled:	**05-10-10 13:45**	Instrument ID:	**GC-11 Agilent 6890**
Received:	**05-10-10 18:30**	Sample Weight:	**1000 mL**
Extracted:	**05-12-10 20:30**	Final Volume:	**10 mL**
Cleaned Up:	**05-13-10 00:30**	Dilution Factor:	**1**
Analyzed:	**05-13-10 17:16**		
Analyst:	**AWG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
12674-11-2	Aroclor 1016	BRL		ug/L	0.2
11104-28-2	Aroclor 1221	BRL		ug/L	0.2
11141-16-5	Aroclor 1232	BRL		ug/L	0.2
53469-21-9	Aroclor 1242	BRL		ug/L	0.2
12672-29-6	Aroclor 1248	BRL		ug/L	0.2
11097-69-1	Aroclor 1254	BRL		ug/L	0.2
11096-82-5	Aroclor 1260	BRL		ug/L	0.2
37324-23-5	Aroclor 1262 †	BRL		ug/L	0.2
11100-14-4	Aroclor 1268 †	BRL		ug/L	0.2

QC Surrogate Compound		Spiked	Measured	Recovery	QC Limits
First	Tetrachloro-*m*-xylene	0.20	0.16	**79** %	30 - 150 %
Column	Decachlorobiphenyl	0.20	0.20	**101** %	30 - 150 %
Second	Tetrachloro-*m*-xylene	0.20	0.16	**81** %	30 - 150 %
Column	Decachlorobiphenyl	0.20	0.22	**109** %	30 - 150 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C. Cleanup performed by EPA Method 3660B and EPA Method 3665A.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

† Non-target analyte. Result is based on a single mid-range calibration standard.

GROUNDWATER ANALYTICAL

EPA Method 8270C
Semivolatile Organics by GC/MS (Part 1)

Field ID:	**110739**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-02**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 12:15**	Instrument ID:	**MS-3 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 12:53**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
62-75-9	N-Nitrosodimethylamine	BRL		ug/L	5
110-86-1	Pyridine	BRL		ug/L	5
108-95-2	Phenol	BRL		ug/L	5
62-53-3	Aniline	BRL		ug/L	5
111-44-4	Bis(2-chloroethyl) ether	BRL		ug/L	5
95-57-8	2-Chlorophenol	BRL		ug/L	5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	5
100-51-6	Benzyl Alcohol	BRL		ug/L	5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	5
95-48-7	2-Methylphenol	BRL		ug/L	5
108-60-1	Bis(2-chloroisopropyl) ether	BRL		ug/L	5
108-39-4/106-44-5	3 and 4-Methylphenol *	BRL		ug/L	5
621-64-7	N-Nitrosodi-n-propylamine	BRL		ug/L	5
98-86-2	Acetophenone	BRL		ug/L	5
67-72-1	Hexachloroethane	BRL		ug/L	5
98-95-3	Nitrobenzene	BRL		ug/L	5
78-59-1	Isophorone	BRL		ug/L	5
88-75-5	2-Nitrophenol	BRL		ug/L	5
105-67-9	2,4-Dimethylphenol	BRL		ug/L	5
111-91-1	Bis(2-chloroethoxy) methane	BRL		ug/L	5
120-83-2	2,4-Dichlorophenol	BRL		ug/L	5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	5
106-47-8	4-Chloroaniline	BRL		ug/L	5
87-68-3	Hexachlorobutadiene	BRL		ug/L	5
59-50-7	4-Chloro-3-methylphenol	BRL		ug/L	5
77-47-4	Hexachlorocyclopentadiene	BRL		ug/L	5
88-06-2	2,4,6-Trichlorophenol	BRL		ug/L	5
95-95-4	2,4,5-Trichlorophenol	BRL		ug/L	5
91-58-7	2-Chloronaphthalene	BRL		ug/L	5
88-74-4	2-Nitroaniline	BRL		ug/L	5
100-25-4	1,4-Dinitrobenzene	BRL		ug/L	5
131-11-3	Dimethyl phthalate	BRL		ug/L	5
99-65-0	1,3-Dinitrobenzene	BRL		ug/L	5
606-20-2	2,6-Dinitrotoluene	BRL		ug/L	5
528-29-0	1,2-Dinitrobenzene	BRL		ug/L	5
99-09-2	3-Nitroaniline	BRL		ug/L	5
51-28-5	2,4-Dinitrophenol	BRL		ug/L	5
100-02-7	4-Nitrophenol	BRL		ug/L	5
132-64-9	Dibenzofuran	BRL		ug/L	5
121-14-2	2,4-Dinitrotoluene	BRL		ug/L	5
84-66-2	Diethyl phthalate	BRL		ug/L	5
7005-72-3	4-Chlorophenyl phenyl ether	BRL		ug/L	5
100-01-6	4-Nitroaniline	BRL		ug/L	5
534-52-1	4,6-Dinitro-2-methylphenol	BRL		ug/L	5

GROUNDWATER ANALYTICAL

EPA Method 8270C (Continued)
Semivolatile Organics by GC/MS (Part 1)

Field ID:	**110739**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-02**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 12:15**	Instrument ID:	**MS-3 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 12:53**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
86-30-6	N-Nitrosodiphenylamine †	BRL		ug/L	5
122-66-7	1,2-Diphenylhydrazine ◊	BRL		ug/L	5
101-55-3	4-Bromophenyl phenyl ether	BRL		ug/L	5
86-74-8	Carbazole	BRL		ug/L	5
84-74-2	Di-*n*-butyl phthalate	BRL		ug/L	5
85-68-7	Butyl benzyl phthalate	BRL		ug/L	5
91-94-1	3,3'-Dichlorobenzidine	BRL		ug/L	5
117-81-7	Bis(2-ethylhexyl) phthalate	BRL		ug/L	5
117-84-0	Di-*n*-octyl phthalate	BRL		ug/L	5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	10	**48** %	15 - 110 %
Phenol-d5	20	8	**38** %	15 - 110 %
Nitrobenzene-d5	10	4	**38** %	30 - 130 %
2-Fluorobiphenyl	10	8	**84** %	30 - 130 %
2,4,6-Tribromophenol	20	19	**94** %	15 - 110 %
Terphenyl-d14	10	8	**81** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C.

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

* Analyzed as 4-Methylphenol.

† Reported as sum of N-Nitrosodiphenylamine and Diphenylamine.

◊ Analyzed as Azobenzene.

GROUNDWATER ANALYTICAL

EPA Method 8270C
Semivolatile Organics by GC/MS-SIM (Part 2)

Field ID:	**110739**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-02**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 12:15**	Instrument ID:	**MS-6 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 14:54**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
91-20-3	Naphthalene	BRL		ug/L	0.5
91-57-6	2-Methylnaphthalene	BRL		ug/L	0.5
208-96-8	Acenaphthylene	BRL		ug/L	0.5
83-32-9	Acenaphthene	BRL		ug/L	0.5
86-73-7	Fluorene	BRL		ug/L	0.5
85-01-8	Phenanthrene	BRL		ug/L	0.5
120-12-7	Anthracene	BRL		ug/L	0.5
206-44-0	Fluoranthene	BRL		ug/L	0.5
129-00-0	Pyrene	BRL		ug/L	0.5
56-55-3	Benzo[a]anthracene	BRL		ug/L	0.1
218-01-9	Chrysene	BRL		ug/L	0.1
205-99-2	Benzo[b]fluoranthene	BRL		ug/L	0.1
207-08-9	Benzo[k]fluoranthene	BRL		ug/L	0.1
50-32-8	Benzo[a]pyrene	BRL		ug/L	0.1
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL		ug/L	0.1
53-70-3	Dibenzo[a,h]anthracene	BRL		ug/L	0.1
191-24-2	Benzo[g,h,i]perylene	BRL		ug/L	0.1
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
118-74-1	Hexachlorobenzene	BRL		ug/L	0.5
87-86-5	Pentachlorophenol	**2.2**		ug/L	1.0

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	8.8	**44** %	15 - 110 %
Phenol-d5	20	8.1	**41** %	15 - 110 %
Nitrobenzene-d5	10	6.2	**62** %	30 - 130 %
2-Fluorobiphenyl	10	6.1	**61** %	30 - 130 %
2,4,6-Tribromophenol	20	16	**82** %	15 - 110 %
Terphenyl-d14	10	6.0	**60** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified by use of selected ion monitoring (SIM) in accordance with Section 7.5.5 of the method.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 8270C
Semivolatile Organics by GC/MS (Part 1)

Field ID:	**110747**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-08**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 14:00**	Instrument ID:	**MS-3 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 13:34**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
62-75-9	N-Nitrosodimethylamine	BRL		ug/L	5
110-86-1	Pyridine	BRL		ug/L	5
108-95-2	Phenol	BRL		ug/L	5
62-53-3	Aniline	BRL		ug/L	5
111-44-4	Bis(2-chloroethyl) ether	BRL		ug/L	5
95-57-8	2-Chlorophenol	BRL		ug/L	5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	5
100-51-6	Benzyl Alcohol	BRL		ug/L	5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	5
95-48-7	2-Methylphenol	BRL		ug/L	5
108-60-1	Bis(2-chloroisopropyl) ether	BRL		ug/L	5
108-39-4/106-44-5	3 and 4-Methylphenol *	BRL		ug/L	5
621-64-7	N-Nitrosodi-n-propylamine	BRL		ug/L	5
98-86-2	Acetophenone	BRL		ug/L	5
67-72-1	Hexachloroethane	BRL		ug/L	5
98-95-3	Nitrobenzene	BRL		ug/L	5
78-59-1	Isophorone	BRL		ug/L	5
88-75-5	2-Nitrophenol	BRL		ug/L	5
105-67-9	2,4-Dimethylphenol	BRL		ug/L	5
111-91-1	Bis(2-chloroethoxy) methane	BRL		ug/L	5
120-83-2	2,4-Dichlorophenol	BRL		ug/L	5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	5
106-47-8	4-Chloroaniline	BRL		ug/L	5
87-68-3	Hexachlorobutadiene	BRL		ug/L	5
59-50-7	4-Chloro-3-methylphenol	BRL		ug/L	5
77-47-4	Hexachlorocyclopentadiene	BRL		ug/L	5
88-06-2	2,4,6-Trichlorophenol	BRL		ug/L	5
95-95-4	2,4,5-Trichlorophenol	BRL		ug/L	5
91-58-7	2-Chloronaphthalene	BRL		ug/L	5
88-74-4	2-Nitroaniline	BRL		ug/L	5
100-25-4	1,4-Dinitrobenzene	BRL		ug/L	5
131-11-3	Dimethyl phthalate	BRL		ug/L	5
99-65-0	1,3-Dinitrobenzene	BRL		ug/L	5
606-20-2	2,6-Dinitrotoluene	BRL		ug/L	5
528-29-0	1,2-Dinitrobenzene	BRL		ug/L	5
99-09-2	3-Nitroaniline	BRL		ug/L	5
51-28-5	2,4-Dinitrophenol	BRL		ug/L	5
100-02-7	4-Nitrophenol	BRL		ug/L	5
132-64-9	Dibenzofuran	BRL		ug/L	5
121-14-2	2,4-Dinitrotoluene	BRL		ug/L	5
84-66-2	Diethyl phthalate	BRL		ug/L	5
7005-72-3	4-Chlorophenyl phenyl ether	BRL		ug/L	5
100-01-6	4-Nitroaniline	BRL		ug/L	5
534-52-1	4,6-Dinitro-2-methylphenol	BRL		ug/L	5

GROUNDWATER ANALYTICAL

EPA Method 8270C (Continued)
Semivolatile Organics by GC/MS (Part 1)

Field ID:	**110747**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-08**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 14:00**	Instrument ID:	**MS-3 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 13:34**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
86-30-6	N-Nitrosodiphenylamine †	BRL		ug/L	5
122-66-7	1,2-Diphenylhydrazine ◊	BRL		ug/L	5
101-55-3	4-Bromophenyl phenyl ether	BRL		ug/L	5
86-74-8	Carbazole	BRL		ug/L	5
84-74-2	Di-*n*-butyl phthalate	BRL		ug/L	5
85-68-7	Butyl benzyl phthalate	BRL		ug/L	5
91-94-1	3,3'-Dichlorobenzidine	BRL		ug/L	5
117-81-7	Bis(2-ethylhexyl) phthalate	BRL		ug/L	5
117-84-0	Di-*n*-octyl phthalate	BRL		ug/L	5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	9	**43** %	15 - 110 %
Phenol-d5	20	7	**34** %	15 - 110 %
Nitrobenzene-d5	10	5	**50** %	30 - 130 %
2-Fluorobiphenyl	10	7	**73** %	30 - 130 %
2,4,6-Tribromophenol	20	19	**94** %	15 - 110 %
Terphenyl-d14	10	8	**81** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C.

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

* Analyzed as 4-Methylphenol.

† Reported as sum of N-Nitrosodiphenylamine and Diphenylamine.

◊ Analyzed as Azobenzene.

GROUNDWATER ANALYTICAL

EPA Method 8270C
Semivolatile Organics by GC/MS-SIM (Part 2)

Field ID:	**110747**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-08**	QC Batch ID:	**SV-2507-F**
Sampled:	**05-10-10 14:00**	Instrument ID:	**MS-6 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-17-10 12:05**	Dilution Factor:	**1**
Analyst:	**MJB**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
91-20-3	Naphthalene	BRL		ug/L	0.5
91-57-6	2-Methylnaphthalene	BRL		ug/L	0.5
208-96-8	Acenaphthylene	BRL		ug/L	0.5
83-32-9	Acenaphthene	BRL		ug/L	0.5
86-73-7	Fluorene	BRL		ug/L	0.5
85-01-8	Phenanthrene	BRL		ug/L	0.5
120-12-7	Anthracene	BRL		ug/L	0.5
206-44-0	Fluoranthene	BRL		ug/L	0.5
129-00-0	Pyrene	BRL		ug/L	0.5
56-55-3	Benzo[a]anthracene	BRL		ug/L	0.1
218-01-9	Chrysene	BRL		ug/L	0.1
205-99-2	Benzo[b]fluoranthene	BRL		ug/L	0.1
207-08-9	Benzo[k]fluoranthene	BRL		ug/L	0.1
50-32-8	Benzo[a]pyrene	BRL		ug/L	0.1
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL		ug/L	0.1
53-70-3	Dibenzo[a,h]anthracene	BRL		ug/L	0.1
191-24-2	Benzo[g,h,i]perylene	BRL		ug/L	0.1
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
118-74-1	Hexachlorobenzene	BRL		ug/L	0.5
87-86-5	Pentachlorophenol	BRL		ug/L	1.0

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	8.1	**40** %	15 - 110 %
Phenol-d5	20	7.4	**37** %	15 - 110 %
Nitrobenzene-d5	10	6.2	**62** %	30 - 130 %
2-Fluorobiphenyl	10	6.0	**60** %	30 - 130 %
2,4,6-Tribromophenol	20	16	**78** %	15 - 110 %
Terphenyl-d14	10	5.7	**57** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified by use of selected ion monitoring (SIM) in accordance with Section 7.5.5 of the method.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 8015B (Modified)
Total Petroleum Hydrocarbons by GC/FID

Field ID:	**110740**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**H2SO4/ Cool/Cool**
Laboratory ID:	**133105-3**	QC Batch ID:	**HF-2210-F**
Sampled:	**05-10-10 12:30**	Instrument ID:	**GC4 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-14-10 02:33**	Dilution Factor:	**1**
Analyst:	**MB**		

Analyte	Concentration	Notes	Units	Reporting Limit
Total Petroleum Hydrocarbons	**0.4**		mg/L	0.2

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
ortho-Terphenyl	0.040	0.032	**79** %	60 - 140 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified to quantify total petroleum hydrocarbons in the range n-C 9 through n-C 36. Results are quantified on the basis of a series of aromatic and aliphatic hydrocarbons, using 5-alpha-androstane as an internal standard.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 8015B (Modified)
Total Petroleum Hydrocarbons by GC/FID

Field ID:	**110748**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**1 L Amber Glass**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**H2SO4/ Cool/Cool**
Laboratory ID:	**133105-9**	QC Batch ID:	**HF-2210-F**
Sampled:	**05-10-10 14:15**	Instrument ID:	**GC4 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**1,000 mL**
Extracted:	**05-13-10 16:00**	Final Volume:	**1 mL**
Analyzed:	**05-14-10 03:27**	Dilution Factor:	**1**
Analyst:	**MB**		

Analyte	Concentration	Notes	Units	Reporting Limit
Total Petroleum Hydrocarbons	BRL		mg/L	0.2

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
ortho-Terphenyl	0.040	0.031	**77** %	60 - 140 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified to quantify total petroleum hydrocarbons in the range n-C 9 through n-C 36. Results are quantified on the basis of a series of aromatic and aliphatic hydrocarbons, using 5-alpha-androstane as an internal standard.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110741** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-04** Sampled: **05-10-10 12:40** Container: **1 L Amber Glass** Preservation: **H2SO4/Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Phenolics, Total	**1.2**	mg/L	0.2	4	6.3 mL	05-17-10 09:04	PHN-2001-W	EPA 9096	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Lachat 8000 Autoanalyzer

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110743** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-06** Sampled: **05-10-10 13:10** Container: **1 L Plastic** Preservation: **Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Solids, Total Suspended	BRL	mg/L	2	1	500 mL	05-14-10 13:33	TSS-1768-W	SM 2540 D	2	JR
Chlorine, Total Residual	BRL	mg/L	0.02	1	5 mL	05-10-10 22:30	TRC-0860-W	SM 4500-Cl G	1	LD
Chromium, Hexavalent	BRL	mg/L	0.01	1	5 mL	05-11-10 10:00	HC-0188-W	EPA 7196A	1	JK

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Thermo Electron Genesys 20

2 Instrument ID: Mettler AT 200 Balance

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110749** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-10** Sampled: **05-10-10 14:15** Container: **1 L Amber Glass** Preservation: **H2SO4/Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Phenolics, Total	**0.9**	mg/L	0.2	4	6.3 mL	05-17-10 09:07	PHN-2001-W	EPA 9096	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Lachat 8000 Autoanalyzer

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110751** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-12** Sampled: **05-10-10 14:50** Container: **1 L Plastic** Preservation: **Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Solids, Total Suspended	**4**	mg/L	2	1	500 mL	05-14-10 13:33	TSS-1768-W	SM 2540 D	2	JR
Chlorine, Total Residual	BRL	mg/L	0.02	1	5 mL	05-10-10 22:30	TRC-0860-W	SM 4500-Cl G	1	LD
Chromium, Hexavalent	BRL	mg/L	0.01	1	5 mL	05-11-10 10:00	HC-0188-W	EPA 7196A	1	JK

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Thermo Electron Genesys 20

2 Instrument ID: Mettler AT 200 Balance

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110752** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-13** Sampled: **05-10-10 14:57** Container: **250 mL Plastic** Preservation: **NaOH/Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Cyanide, Total	BRL	mg/L	0.01	1	50 mL	05-15-10 11:34	TCN-1567-W	EPA 9012A	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Lachat 8000 Autoanalyzer

GROUNDWATER ANALYTICAL

Inorganic Chemistry

Field ID: **110753** Matrix: **Aqueous**
Project: **16682** Received: **05-10-10 18:30**
Client: **Environmental Health & Engineering, Inc.**

Lab ID: **133105-14** Sampled: **05-10-10 13:10** Container: **250 mL Plastic** Preservation: **NaOH/Cool**

Analyte	Result	Units	RL	DF	Volume	Analyzed	QC Batch	Method	Inst	Analyst
Cyanide, Total	BRL	mg/L	0.01	1	50 mL	05-15-10 11:35	TCN-1567-W	EPA 9012A	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

DF Dilution Factor.

1 Instrument ID: Lachat 8000 Autoanalyzer

GROUNDWATER ANALYTICAL

Trace Metals

Field ID:	**10742**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**250 mL Plastic**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HNO3 / Cool**
Laboratory ID:	**133105-5**	Preserved:	**05-10-10 12:50**
Sampled:	**05-10-10 12:50**		
Received:	**05-10-10 18:30**		

Analysis Method	QC Batch ID	Prep Method	Prepared	Sample Volume	Instrument ID	Analyst
EPA 6020A[1]	MB-4068-W	EPA 3010A	05-12-10 00:00	50 mL	ICPMS-1 ELAN 9000	MP
EPA 6010B[2]	MB-4068-W	EPA 3010A	05-12-10 00:00	50 mL	ICP-1 PE 3000	MP
EPA 7470A[3]	MP-2284-W	EPA 7470A	05-12-10 00:00	25 mL	CVAA-1 PE FIMS	MP

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit	DF	Analyzed	Method
7440-36-0	Antimony, Total	BRL		mg/L	0.006	1	05-17-10 13:04	EPA 6020A[1]
7440-38-2	Arsenic, Total	BRL		mg/L	0.01	1	05-17-10 13:04	EPA 6020A[1]
7440-43-9	Cadmium, Total	BRL		mg/L	0.004	1	05-12-10 18:14	EPA 6010B[2]
7440-47-3	Chromium, Total	BRL		mg/L	0.01	1	05-12-10 18:14	EPA 6010B[2]
7440-50-8	Copper, Total	BRL		mg/L	0.025	1	05-12-10 18:14	EPA 6010B[2]
7439-89-6	Iron, Total	**0.4**		mg/L	0.1	1	05-12-10 18:14	EPA 6010B[2]
7439-92-1	Lead, Total	BRL		mg/L	0.005	1	05-17-10 13:04	EPA 6020A[1]
7439-97-6	Mercury, Total	BRL		mg/L	0.0002	1	05-13-10 14:10	EPA 7470A[3]
7440-02-0	Nickel, Total	BRL		mg/L	0.04	1	05-12-10 18:14	EPA 6010B[2]
7782-49-2	Selenium, Total	BRL		mg/L	0.005	1	05-17-10 13:04	EPA 6020A[1]
7440-22-4	Silver, Total	BRL		mg/L	0.007	1	05-12-10 18:14	EPA 6010B[2]
7440-66-6	Zinc, Total	**0.41**		mg/L	0.05	1	05-12-10 18:14	EPA 6010B[2]

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

DF Dilution Factor.

GROUNDWATER ANALYTICAL

Trace Metals

Field ID:	**10750**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**250 mL Plastic**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HNO3 / Cool**
Laboratory ID:	**133105-11**	Preserved:	**05-10-10 14:40**
Sampled:	**05-10-10 14:40**		
Received:	**05-10-10 18:30**		

Analysis Method	QC Batch ID	Prep Method	Prepared	Sample Volume	Instrument ID	Analyst
EPA 6020A[1]	MB-4068-W	EPA 3010A	05-12-10 00:00	50 mL	ICPMS-1 ELAN 9000	MP
EPA 6010B[2]	MB-4068-W	EPA 3010A	05-12-10 00:00	50 mL	ICP-1 PE 3000	MP
EPA 7470A[3]	MP-2284-W	EPA 7470A	05-12-10 00:00	25 mL	CVAA-1 PE FIMS	MP

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit	DF	Analyzed	Method
7440-36-0	Antimony, Total	BRL		mg/L	0.006	1	05-17-10 13:10	EPA 6020A[1]
7440-38-2	Arsenic, Total	BRL		mg/L	0.01	1	05-17-10 13:10	EPA 6020A[1]
7440-43-9	Cadmium, Total	BRL		mg/L	0.004	1	05-12-10 18:29	EPA 6010B[2]
7440-47-3	Chromium, Total	BRL		mg/L	0.01	1	05-12-10 18:29	EPA 6010B[2]
7440-50-8	Copper, Total	BRL		mg/L	0.025	1	05-12-10 18:29	EPA 6010B[2]
7439-89-6	Iron, Total	**0.9**		mg/L	0.1	1	05-12-10 18:29	EPA 6010B[2]
7439-92-1	Lead, Total	BRL		mg/L	0.005	1	05-17-10 13:10	EPA 6020A[1]
7439-97-6	Mercury, Total	BRL		mg/L	0.0002	1	05-13-10 14:06	EPA 7470A[3]
7440-02-0	Nickel, Total	BRL		mg/L	0.04	1	05-12-10 18:29	EPA 6010B[2]
7782-49-2	Selenium, Total	BRL		mg/L	0.005	1	05-17-10 13:10	EPA 6020A[1]
7440-22-4	Silver, Total	BRL		mg/L	0.007	1	05-12-10 18:29	EPA 6010B[2]
7440-66-6	Zinc, Total	**0.08**		mg/L	0.05	1	05-12-10 18:29	EPA 6010B[2]

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

DF Dilution Factor.

GROUNDWATER ANALYTICAL

EPA Method 8260B
Volatile Organics by GC/MS

Field ID:	**110736**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HCl/ Cool**
Laboratory ID:	**133105-15**	QC Batch ID:	**VM10-1115-W**
Sampled:	**05-10-10 13:10**	Instrument ID:	**MS-10 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**5 mL**
Analyzed:	**05-13-10 12:02**	Dilution Factor:	**1**
Analyst:	**LMG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
75-71-8	Dichlorodifluoromethane	BRL		ug/L	0.5
74-87-3	Chloromethane	BRL		ug/L	0.5
75-01-4	Vinyl Chloride	BRL		ug/L	0.5
74-83-9	Bromomethane	BRL		ug/L	0.5
75-00-3	Chloroethane	BRL		ug/L	0.5
75-69-4	Trichlorofluoromethane	BRL		ug/L	0.5
60-29-7	Diethyl Ether	BRL		ug/L	2
75-35-4	1,1-Dichloroethene	BRL		ug/L	0.5
76-13-1	1,1,2-Trichlorotrifluoroethane	BRL		ug/L	5
67-64-1	Acetone	BRL		ug/L	10
75-15-0	Carbon Disulfide	BRL		ug/L	5
75-09-2	Methylene Chloride	BRL		ug/L	3
107-13-1	Acrylonitrile	BRL		ug/L	0.5
156-60-5	*trans*- 1,2-Dichloroethene	BRL		ug/L	0.5
1634-04-4	Methyl *tert*- butyl Ether (MTBE)	BRL		ug/L	0.5
75-34-3	1,1-Dichloroethane	BRL		ug/L	0.5
594-20-7	2,2-Dichloropropane	BRL		ug/L	0.5
156-59-2	*cis*- 1,2-Dichloroethene	BRL		ug/L	0.5
78-93-3	2-Butanone (MEK)	BRL		ug/L	5
74-97-5	Bromochloromethane	BRL		ug/L	0.5
109-99-9	Tetrahydrofuran (THF)	BRL		ug/L	5
67-66-3	Chloroform	BRL		ug/L	0.5
71-55-6	1,1,1-Trichloroethane	BRL		ug/L	0.5
56-23-5	Carbon Tetrachloride	BRL		ug/L	0.5
563-58-6	1,1-Dichloropropene	BRL		ug/L	0.5
71-43-2	Benzene	BRL		ug/L	0.5
107-06-2	1,2-Dichloroethane	BRL		ug/L	0.5
79-01-6	Trichloroethene	BRL		ug/L	0.5
78-87-5	1,2-Dichloropropane	BRL		ug/L	0.5
74-95-3	Dibromomethane	BRL		ug/L	0.5
75-27-4	Bromodichloromethane	BRL		ug/L	0.5
123-91-1	1,4-Dioxane	BRL		ug/L	500
10061-01-5	*cis*- 1,3-Dichloropropene	BRL		ug/L	0.4
108-10-1	4-Methyl-2-Pentanone (MIBK)	BRL		ug/L	5
108-88-3	Toluene	BRL		ug/L	0.5
10061-02-6	*trans*- 1,3-Dichloropropene	BRL		ug/L	0.4
79-00-5	1,1,2-Trichloroethane	BRL		ug/L	0.5
127-18-4	Tetrachloroethene	BRL		ug/L	0.5
142-28-9	1,3-Dichloropropane	BRL		ug/L	0.5
591-78-6	2-Hexanone	BRL		ug/L	5
124-48-1	Dibromochloromethane	BRL		ug/L	0.5
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.5
108-90-7	Chlorobenzene	BRL		ug/L	0.5
630-20-6	1,1,1,2-Tetrachloroethane	BRL		ug/L	0.5
100-41-4	Ethylbenzene	BRL		ug/L	0.5
108-38-3/106-42-3	*meta*- Xylene and *para*- Xylene	BRL		ug/L	0.5

GROUNDWATER ANALYTICAL

EPA Method 8260B (Continued)
Volatile Organics by GC/MS

Field ID:	**110736**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HCl/ Cool**
Laboratory ID:	**133105-15**	QC Batch ID:	**VM10-1115-W**
Sampled:	**05-10-10 13:10**	Instrument ID:	**MS-10 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**5 mL**
Analyzed:	**05-13-10 12:02**	Dilution Factor:	**1**
Analyst:	**LMG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
95-47-6	*ortho*-Xylene	BRL		ug/L	0.5
100-42-5	Styrene	BRL		ug/L	0.5
75-25-2	Bromoform	BRL		ug/L	0.5
98-82-8	Isopropylbenzene	BRL		ug/L	0.5
108-86-1	Bromobenzene	BRL		ug/L	0.5
79-34-5	1,1,2,2-Tetrachloroethane	BRL		ug/L	0.5
96-18-4	1,2,3-Trichloropropane	BRL		ug/L	0.5
110-57-6	*trans*-1,4-Dichloro-2-butene	BRL		ug/L	25
103-65-1	*n*-Propylbenzene	BRL		ug/L	0.5
95-49-8	2-Chlorotoluene	BRL		ug/L	0.5
108-67-8	1,3,5-Trimethylbenzene	BRL		ug/L	0.5
106-43-4	4-Chlorotoluene	BRL		ug/L	0.5
98-06-6	*tert*-Butylbenzene	BRL		ug/L	0.5
95-63-6	1,2,4-Trimethylbenzene	BRL		ug/L	0.5
135-98-8	*sec*-Butylbenzene	BRL		ug/L	0.5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	0.5
99-87-6	4-Isopropyltoluene	BRL		ug/L	0.5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	0.5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	0.5
104-51-8	*n*-Butylbenzene	BRL		ug/L	0.5
96-12-8	1,2-Dibromo-3-chloropropane	BRL		ug/L	0.5
108-70-3	1,3,5-Trichlorobenzene	BRL		ug/L	0.5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	0.5
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
91-20-3	Naphthalene	BRL		ug/L	0.5
87-61-6	1,2,3-Trichlorobenzene	BRL		ug/L	0.5
75-65-0	*tert*-Butyl Alcohol (TBA)	BRL		ug/L	20
108-20-3	Di-isopropyl Ether (DIPE)	BRL		ug/L	0.5
637-92-3	Ethyl *tert*-butyl Ether (ETBE)	BRL		ug/L	0.5
994-05-8	*tert*-Amyl Methyl Ether (TAME)	BRL		ug/L	0.5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
Dibromofluoromethane	10	11	**111** %	70 - 130 %
1,2-Dichloroethane-d_4	10	12	**119** %	70 - 130 %
Toluene-d_8	10	12	**121** %	70 - 130 %
4-Bromofluorobenzene	10	11	**109** %	70 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample preparation performed by EPA Method 5030B.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 8260B
Volatile Organics by GC/MS

Field ID:	**110744**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HCl/ Cool**
Laboratory ID:	**133105-17**	QC Batch ID:	**VM10-1115-W**
Sampled:	**05-10-10 13:30**	Instrument ID:	**MS-10 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**5 mL**
Analyzed:	**05-13-10 12:26**	Dilution Factor:	**1**
Analyst:	**LMG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
75-71-8	Dichlorodifluoromethane	BRL		ug/L	0.5
74-87-3	Chloromethane	BRL		ug/L	0.5
75-01-4	Vinyl Chloride	BRL		ug/L	0.5
74-83-9	Bromomethane	BRL		ug/L	0.5
75-00-3	Chloroethane	BRL		ug/L	0.5
75-69-4	Trichlorofluoromethane	BRL		ug/L	0.5
60-29-7	Diethyl Ether	BRL		ug/L	2
75-35-4	1,1-Dichloroethene	BRL		ug/L	0.5
76-13-1	1,1,2-Trichlorotrifluoroethane	BRL		ug/L	5
67-64-1	Acetone	BRL		ug/L	10
75-15-0	Carbon Disulfide	BRL		ug/L	5
75-09-2	Methylene Chloride	BRL		ug/L	3
107-13-1	Acrylonitrile	BRL		ug/L	0.5
156-60-5	*trans*-1,2-Dichloroethene	BRL		ug/L	0.5
1634-04-4	Methyl *tert*-butyl Ether (MTBE)	BRL		ug/L	0.5
75-34-3	1,1-Dichloroethane	BRL		ug/L	0.5
594-20-7	2,2-Dichloropropane	BRL		ug/L	0.5
156-59-2	*cis*-1,2-Dichloroethene	BRL		ug/L	0.5
78-93-3	2-Butanone (MEK)	BRL		ug/L	5
74-97-5	Bromochloromethane	BRL		ug/L	0.5
109-99-9	Tetrahydrofuran (THF)	BRL		ug/L	5
67-66-3	Chloroform	BRL		ug/L	0.5
71-55-6	1,1,1-Trichloroethane	BRL		ug/L	0.5
56-23-5	Carbon Tetrachloride	BRL		ug/L	0.5
563-58-6	1,1-Dichloropropene	BRL		ug/L	0.5
71-43-2	Benzene	BRL		ug/L	0.5
107-06-2	1,2-Dichloroethane	BRL		ug/L	0.5
79-01-6	Trichloroethene	BRL		ug/L	0.5
78-87-5	1,2-Dichloropropane	BRL		ug/L	0.5
74-95-3	Dibromomethane	BRL		ug/L	0.5
75-27-4	Bromodichloromethane	BRL		ug/L	0.5
123-91-1	1,4-Dioxane	BRL		ug/L	500
10061-01-5	*cis*-1,3-Dichloropropene	BRL		ug/L	0.4
108-10-1	4-Methyl-2-Pentanone (MIBK)	BRL		ug/L	5
108-88-3	Toluene	BRL		ug/L	0.5
10061-02-6	*trans*-1,3-Dichloropropene	BRL		ug/L	0.4
79-00-5	1,1,2-Trichloroethane	BRL		ug/L	0.5
127-18-4	Tetrachloroethene	BRL		ug/L	0.5
142-28-9	1,3-Dichloropropane	BRL		ug/L	0.5
591-78-6	2-Hexanone	BRL		ug/L	5
124-48-1	Dibromochloromethane	BRL		ug/L	0.5
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.5
108-90-7	Chlorobenzene	BRL		ug/L	0.5
630-20-6	1,1,1,2-Tetrachloroethane	BRL		ug/L	0.5
100-41-4	Ethylbenzene	BRL		ug/L	0.5
108-38-3/106-42-3	*meta*-Xylene and *para*-Xylene	BRL		ug/L	0.5

GROUNDWATER ANALYTICAL

EPA Method 8260B (Continued)
Volatile Organics by GC/MS

Field ID:	**110744**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**HCl/ Cool**
Laboratory ID:	**133105-17**	QC Batch ID:	**VM10-1115-W**
Sampled:	**05-10-10 13:30**	Instrument ID:	**MS-10 HP 6890**
Received:	**05-10-10 18:30**	Sample Volume:	**5 mL**
Analyzed:	**05-13-10 12:26**	Dilution Factor:	**1**
Analyst:	**LMG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
95-47-6	*ortho*-Xylene	BRL		ug/L	0.5
100-42-5	Styrene	BRL		ug/L	0.5
75-25-2	Bromoform	BRL		ug/L	0.5
98-82-8	Isopropylbenzene	BRL		ug/L	0.5
108-86-1	Bromobenzene	BRL		ug/L	0.5
79-34-5	1,1,2,2-Tetrachloroethane	BRL		ug/L	0.5
96-18-4	1,2,3-Trichloropropane	BRL		ug/L	0.5
110-57-6	*trans*-1,4-Dichloro-2-butene	BRL		ug/L	25
103-65-1	*n*-Propylbenzene	BRL		ug/L	0.5
95-49-8	2-Chlorotoluene	BRL		ug/L	0.5
108-67-8	1,3,5-Trimethylbenzene	BRL		ug/L	0.5
106-43-4	4-Chlorotoluene	BRL		ug/L	0.5
98-06-6	*tert*-Butylbenzene	BRL		ug/L	0.5
95-63-6	1,2,4-Trimethylbenzene	BRL		ug/L	0.5
135-98-8	*sec*-Butylbenzene	BRL		ug/L	0.5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	0.5
99-87-6	4-Isopropyltoluene	BRL		ug/L	0.5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	0.5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	0.5
104-51-8	*n*-Butylbenzene	BRL		ug/L	0.5
96-12-8	1,2-Dibromo-3-chloropropane	BRL		ug/L	0.5
108-70-3	1,3,5-Trichlorobenzene	BRL		ug/L	0.5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	0.5
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
91-20-3	Naphthalene	BRL		ug/L	0.5
87-61-6	1,2,3-Trichlorobenzene	BRL		ug/L	0.5
75-65-0	*tert*-Butyl Alcohol (TBA)	BRL		ug/L	20
108-20-3	Di-isopropyl Ether (DIPE)	BRL		ug/L	0.5
637-92-3	Ethyl *tert*-butyl Ether (ETBE)	BRL		ug/L	0.5
994-05-8	*tert*-Amyl Methyl Ether (TAME)	BRL		ug/L	0.5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
Dibromofluoromethane	10	11	**105** %	70 - 130 %
1,2-Dichloroethane-d_4	10	11	**113** %	70 - 130 %
Toluene-d_8	10	12	**119** %	70 - 130 %
4-Bromofluorobenzene	10	11	**108** %	70 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample preparation performed by EPA Method 5030B.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 504.1
EDB and DBCP by GC/ECD

Field ID:	**110737**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-16**	QC Batch ID:	**PV-0987-E**
Sampled:	**05-10-10 13:10**	Instrument ID:	**GC-6 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**35 mL**
Extracted:	**05-13-10 16:45**	Final Volume:	**2 mL**
Analyzed:	**05-13-10 23:04**	Dilution Factor:	**1**
Analyst:	**AWG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.02
96-12-8	1,2-Dibromo-3-Chloropropane (DBCP)	BRL		ug/L	0.02

Method Reference: Methods for the Determination of Organic Compounds in Drinking Water, Supplement III, US EPA, EPA-600/R-95/131 (1995). Method Revision 1.1.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

EPA Method 504.1
EDB and DBCP by GC/ECD

Field ID:	**110745**	Matrix:	**Aqueous**
Project:	**16682**	Container:	**40 mL VOA Vial**
Client:	**Environmental Health & Engineering, Inc.**	Preservation:	**Cool**
Laboratory ID:	**133105-18**	QC Batch ID:	**PV-0987-E**
Sampled:	**05-10-10 13:30**	Instrument ID:	**GC-6 HP 5890**
Received:	**05-10-10 18:30**	Sample Volume:	**35 mL**
Extracted:	**05-13-10 16:45**	Final Volume:	**2 mL**
Analyzed:	**05-14-10 00:04**	Dilution Factor:	**1**
Analyst:	**AWG**		

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.02
96-12-8	1,2-Dibromo-3-Chloropropane (DBCP)	BRL		ug/L	0.02

Method Reference: Methods for the Determination of Organic Compounds in Drinking Water, Supplement III, US EPA, EPA-600/R-95/131 (1995). Method Revision 1.1.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Project Narrative

Project:	**16682**	Lab ID:	**133105**
Client:	**Environmental Health & Engineering, Inc.**	Received:	**05-10-10 18:30**

A. Documentation and Client Communication

The following documentation discrepancies, and client changes or amendments were noted for this project:

1 . No documentation discrepancies, changes, or amendments were noted.

B. Method Modifications, Non-Conformances and Observations

The sample(s) in this project were analyzed by the references analytical method(s), and no method modifications, non-conformances or analytical issues were noted, except as indicated below:

1 . EPA 6010B Note: Samples 133105-5 and -11. Samples were analyzed for selected target analytes, as requested by client.

2 . EPA 8260B Non-conformance: Laboratory control sample (LCS) analyte 1,4-Dioxane was above recommended recovery limits for QC batch VM10-1115-W.

3 . EPA 8270C Modification: Samples 133105-2 and -8. Method modified by use of selected ion monitoring (SIM) in accordance with Section 7.5.5 of the method. GC/MS-SIM was used to achieve low quantification limits necessary for regulatory compliance.

GROUNDWATER ANALYTICAL

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CHAIN-OF-CUSTODY RECORD AND WORK ORDER

Project Name:	Firm: EHE
Project Number: 16682	Address: 117 4th Ave
Sampler Name: SBL	City / State / Zip: Needham, MA ~~04~~ 02494
Project Manager: Cindee Campisano	Telephone: 617 593 1298

INSTRUCTIONS: Use separate line for each container (except replicates).

TURNAROUND

- ☐ STANDARD (10 Business Days)
- ☒ PRIORITY (5 Business Days)
- ☐ RUSH (RAN- _____)
  (Rush requires Rush Authorization Number)
- ☒ Please Email to: SLetourneau@ehemi.com
- ☐ Please FAX to: _____

BILLING

- ☒ Purchase Order No.: 100 1144
- ☐ Third Party Billing: _____
- ☐ GWA Quote: _____

ANALYSIS REQUEST

OPTIONS: ☐ TIC Search

Volatiles — SDWA: ☐ 524.2+MTBE; NPDES: ☐ 624; RCRA/21E: ☐ 8260B TCL+MTBE, ☐ 8260B NH PETROLEUM, ☒ 8260B

Volatiles — NPDES: ☐ 602+MTBE; ☐ 601; ☐ 601/602+MTBE; RCRA/21E: ☐ 8021B Aromatics, ☐ 8021B Halocarbons, ☐ 8021B

Semivolatiles — OPTIONS: ☐ Acid Only, ☐ B/N Only, ☐ TIC Search; SDWA: ☐ 525.2; NPDES: ☐ 625; ☐ 625 PAHs only; RCRA/21E: ☒ 8270C, ☐ 8270C PAHs only

Pest/Herb/PCBs Extractable — SDWA: ☐ 505 ☐ 508; NPDES: ☐ 608 Pesticides; ☐ 608 PCBs; RCRA/21E: ☐ 8081A Pesticides, ☒ 8082 PCBs, ☐ 8151A Herbicides, ☐ 8011 EDB/DBCP

Pest/Herb/PCBs Vol. — SDWA: ☐ 531.1; ☐ 515.1; ☒ 504.1 EDB/DBCP; NPDES: ☐ 615

Metals — NPDES: ☐ 13 Priority Pollutant; RCRA/21E: ☐ 8 RCRA, ☐ 5 RCRA, ☐ MA List Metals, ☐ 23 TAL, ☒ As, Pb, Se, Sb, Cd, Cr, Cu, Fe, Ni, Zn, Ag (Specify: Total Phenolics)

SDWA: ☐ Lead and Copper

Specify For Water Samples: ☒ Total ☐ Dissolved

Petroleum Hydrocarbon Ext. TPH — ☐ TPH-HR; ☐ Diesel Range Organics (DRO) ☐ ME DRO; ☐ CT ETPH; ☐ MA DEP EPH w/all targets ☐ EPH Carbon Ranges only ☐ EPH w/4 PAHs; ☐ Hydrocarbon Fingerprint (GC/FID by ASTM D3328-90 Mod.)

Petroleum Hydrocarbon Vol. TPH — ☒ TPH by GC/FID (8015B Mod) Quantitative Only; ☐ Gasoline Range Organics (GRO) ☐ ME GRO; ☐ MA DEP VPH w/all targets ☐ VPH Carbon ranges only

Haz. Waste — ☐ TCLP ☐ SPLP ☐ 6 Metals ☐ Pb only ☐ VOA ☐ Semi VOA ☐ Pesticides ☐ Herbicides; ☐ Corrosivity (as pH) ☐ Reactivity ☐ Ignitability (as Flashpoint) ☐ Paint Filter; ☐ MA Basic Disposal Criteria: 8260B, TPH by GC, PCBs, 5 Metals, Corrosivity, Ignitability, Reactivity

General Chemistry — ☐ Dissolved Phosphorus; ☐ Ammonia ☐ TKN ☐ Total Phosphorus ☐ Total N (as NO2/NO3/TKN); ☐ Oil & Grease; ☐ COD ☐ TOC; ☐ BOD ☐ TDS ☒ SS ☐ TS ☐ Alkalinity; ☐ Cyanide, Total ☐ Cyanide, Physiologically Available; ☐ pH ☐ Dissolved Oxygen ☐ Turbidity

Other — ☐ Total Coliform ☐ Fecal Coliform ☐ HPC; X Hexavalent Chromium; X Cold vapor AA for mercury; X Residual Chlorine

Sampling DATE	Sampling TIME	SAMPLE IDENTIFICATION	Matrix	Type	Container(s)	Preservation	Filtered	LABORATORY NUMBER (Lab Use Only)
			GROUNDWATER; DRINKING WATER; WASTEWATER; SOIL; OTHER SOLID; OIL/ORGANIC LIQUID	COMPOSITE; GRAB	NUMBER; 40mL VOA Vial; 60mL/2 oz Glass; 120mL/4 oz Amber Glass; 250mL/8 oz Glass; 500mL/16 oz Glass; 1L/32 oz Amber Glass; 250mL/8 oz Plastic; 500mL/16 oz Plastic; 1L/32 oz Plastic; 120mL Sterile	HCl; HNO3; H2SO4; NaOH; Methanol; Sodium Bisulfate; Thio; ICE	YES; NO	
5/10	1140	110736	X	X	3 X	X	X	
	1150	110737			3 X	X		
	1200	110738			2 X			
	1215	110739			2 X			
	1230	110740			2 X	X		
	1240	110741			1 X	X		
	1250	110742			1 X	X		
	1310	110743			1 X			
	1315	110744			3 X	X		
	1330	110745			3 X	X		
	1345	110746			2 X			
↓	1400	110747	↓	↓	2 X	X	↓	

REMARKS / SPECIAL INSTRUCTIONS

MA DEP MCP Data Enhancement Affirmation

- ☐ YES ☐ NO MCP Data Certification required.
- ☐ YES ☐ NO MCP Drinking Water Sample included.
  (Require collection of contingent duplicate sample. Trip blanks are also required, if VOA sample collected).

Signature: _____

DATA QUALITY OBJECTIVES

Regulatory Program

State	Standard	Deliverables
☐ CT	☐ MCP GW-1/S-1	☐ PWS Form
☐ ME	☐ MCP GW-2/S-2	☐ MWRA
☐ MA	☐ NY STARS	☐ _____
☐ NH	☐ Drinking Water	
☐ NY	☐ Wastewater	
☐ RI	☐ Waste Disposal	
☐ VT	☐ Dredge Material	
☐ ___	☐ _____	

Project Specific QC

Many regulatory programs and EPA methods require project specific QC. Project specific QC includes Sample Duplicates, Matrix Spikes, and/or Matrix Spike Duplicates. Laboratory QC is not project specific unless prearranged. Project specific QC samples are charged on a per sample basis. **Each MS, MSD and Sample Duplicate requires an additional sample aliquot.**

Project Specific QC Required	Selection of QC Sample
☐ Sample Duplicate	☐ Please use sample:
☐ Matrix Spike	_____
☐ Matrix Spike Duplicate	

CHAIN-OF-CUSTODY RECORD

NOTE: All samples submitted subject to Standard Terms and Conditions on reverse hereof.

	Date	Time		
Relinquished by Sampler: Sara	5/10/10	1640	Received by: Alan Maddigan	Receipt Temperature: ☒ Ice ☐ Refrigerated 2.0°C (2-6°C Recommended)
Relinquished by: Alan Maddigan	5/10/10	6:30	Received by:	Container Count: 25
Relinquished by:			Received by Laboratory:	Shipping/Airbill Number:

Method of Shipment: ☒ GWA Courier ☐ Express Mail ☐ Federal Express ☐ UPS ☐ Hand ☐ _____ | Custody Seal Number:

GROUNDWATER ANALYTICAL

228 Main Street, P.O. Box 1200
Buzzards Bay, MA 02532
Telephone (508) 759-4441 • FAX (508) 759-4475
www.groundwateranalytical.com

CHAIN-OF-CUSTODY RECORD AND WORK ORDER

Project Name:	Firm: EHE
Project Number: 16682	Address: 117 4th Ave
Sampler Name: SBL	City / State / Zip:
Project Manager: Cindee Campisano	Telephone:

INSTRUCTIONS: Use separate line for each container (except replicates).

TURNAROUND

- ☐ STANDARD (10 Business Days)
- ☒ PRIORITY (5 Business Days)
- ☐ RUSH (RAN-_____)
  (Rush requires Rush Authorization Number)
  - ☐ Please Email to: _____
  - ☐ Please FAX to: _____

BILLING

- ☐ Purchase Order No.: _____
- ☐ Third Party Billing: _____
- ☐ GWA Quote: _____

ANALYSIS REQUEST

OPTIONS: ☐ TIC Search

Volatiles: SDWA ☐ 524.2-MTBE; NPDES ☐ 624; RCRA/21E ☐ 8260B TCL+MTBE, ☐ 8260B NH PETROLEUM, ☐ 8260B

Volatiles: NPDES ☐ 602+MTBE; ☐ 8021B Aromatics; ☐ 8021B Halocarbons; ☐ 601/602+MTBE; ☐ 8021B; ☐ 8270C

Semivolatiles: ☐ Acid Only, ☐ BN Only, ☐ TIC Search; SDWA ☐ 525.2; NPDES ☐ 625; ☐ 625 PAHs only; RCRA/21E ☐ 8270C PAHs only

Pest/Herb/PCBs Extractable: SDWA ☐ 505 ☐ 508; NPDES ☐ 608 Pesticides; ☐ 608 PCBs; RCRA/21E ☐ 8081A Pesticides; ☐ 8082 PCBs

Pest/Herb/PCBs Vol.: SDWA ☐ 531.1; ☐ 515.1; NPDES ☐ 615; RCRA/21E ☐ 8151A Herbicides; ☐ 8011 EPA/DBCP

Metals: SDWA ☐ Lead and Copper; NPDES ☐ 13 Priority Pollutant; RCRA/21E ☐ 8 RCRA, ☐ 5 RCRA, ☐ MA List Metals, ☐ 23 TAL

Metals: Specify For Water Samples ☒ Total ☐ Dissolved

Metals: Specify: As, Pb, Se, Sb, Cd, Cr, Cu, Fe, Ni, Zn, Ag; Total Phenolics

Petroleum Hydrocarbon Ext. TPH: ☐ TPH-HR; ☐ Diesel Range Organics (DRO) ☐ ME-DRO; ☐ CT ETPH; ☐ MA DEP EPH w/all targets ☐ EPH Carbon Ranges only ☐ EPH w/4 PAHs; ☐ Hydrocarbon Fingerprint (DF/FID by ASTM D3328-05-Mod.)

Petroleum Hydrocarbon Vol. TPH: ☒ TPH by GC/FID (8015B Mod) Quantitative Only; ☐ Gasoline Range Organics (GRO) ☐ ME-GRO; ☐ MA DEP VPH w/all targets ☐ VPH Carbon ranges only

Haz. Waste: ☐ TCLP ☐ SPLP ☐ 8 Metals ☐ Pb only ☐ VOA ☐ Semi. VOA ☐ Pesticides ☐ Herbicides; ☐ Corrosivity (as pH) ☐ Reactivity ☐ Ignitability (as Flashpoint) ☐ Paint Filter; ☐ MA Basic Disposal Criteria: 8260B, TPH by GC, PCBs, 6 Metals, Corrosivity, Ignitability, Reactivity

General Chemistry: ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Fluoride ☐ Sulfate; ☐ Dissolved Phosphorus; ☐ Ammonia ☐ TKN ☐ Total Phosphorus ☐ Total N (as NO2/NO3/TKN); ☐ Oil & Grease; ☐ COD ☐ TOC; ☐ BOD ☐ TDS ☒ TSS ☐ TS ☐ Alkalinity; ☒ Cyanide, Total ☐ Cyanide, Physiologically Available; ☐ pH ☐ Dissolved Oxygen ☐ Turbidity

Other: ☐ Total Coliform ☐ Fecal Coliform ☐ HPC; ☒ Hexavalent Chromium; ☒ Cold vapor AA - mercury; ☒ Residual Chlorine

Sampling DATE	Sampling TIME	SAMPLE IDENTIFICATION	Matrix	Type	Container(s)	Preservation	Filtered	LABORATORY NUMBER (Lab Use Only)
			GROUNDWATER; DRINKING WATER; WASTEWATER; SOIL; OTHER SOLID; OIL/ORGANIC LIQUID	COMPOSITE; GRAB	NUMBER; 40mL VOA Vial; 60mL/2 oz Glass; 120mL/4 oz Amber Glass; 250mL/8 oz Glass; 500mL/16 oz Glass; 1&2 oz Amber Glass; 250mL/8 oz Plastic; 500mL/16 oz Plastic; 1L/32 oz Plastic; 120mL Sterile	HCl; HNO3; H2SO4; NaOH; Methanol; Sodium Bisulfate; ICE	YES; NO	
5/10	1415	110748	X	X	2		X	
	1430	110749			1 X	X		
	1440	110750			1 X	X		
	1450	110751			1 X	X		
	1457	110752			1 X	X		
	1510	110753			1 X	X		

REMARKS / SPECIAL INSTRUCTIONS

MA DEP MCP Data Enhancement Affirmation

- ☐ YES ☐ NO MCP Data Certification required.
- ☐ YES ☐ NO MCP Drinking Water Sample included.
  (Require collection of contingent duplicate sample. Trip blanks are also required, if VOA sample collected).

Signature: _____

DATA QUALITY OBJECTIVES

Regulatory Program

State	Standard	Deliverables
☐ CT	☐ MCP GW-1/S-1	☐ PWS Form
☐ ME	☐ MCP GW-2/S-2	☐ MWRA
☐ MA	☐ NY STARS	☐ _____
☐ NH	☐ Drinking Water	
☐ NY	☐ Wastewater	
☐ RI	☐ Waste Disposal	
☐ VT	☐ Dredge Material	
☐ ___	☐ _____	

Project Specific QC

Many regulatory programs and EPA methods require project specific QC. Project specific QC includes Sample Duplicates, Matrix Spikes, and/or Matrix Spike Duplicates. Laboratory QC is not project specific unless prearranged. Project specific QC samples are charged on a per sample basis. **Each MS, MSD and Sample Duplicate requires an additional sample aliquot.**

Project Specific QC Required

- ☐ Sample Duplicate
- ☐ Matrix Spike
- ☐ Matrix Spike Duplicate

Selection of QC Sample

- ☐ Please use sample: _____

CHAIN-OF-CUSTODY RECORD

NOTE: All samples submitted subject to Standard Terms and Conditions on reverse hereof.

	Date	Time		
Relinquished by Sampler: Sat	5/10/10	1640	Received by: Alan Maddigan	Receipt Temperature: ☒ Ice ☐ Refrigerated 2-8°C Recommended 2.0°C
Relinquished by: Alan Maddigan	5/10/10	6:30	Received by:	Container Count: 7
Relinquished by:	Date	Time	Received by Laboratory:	Shipping/Airbill Number:

Method of Shipment: ☒ GWA Courier ☐ Express Mail ☐ Federal Express ☐ UPS ☐ Hand ☐ _____

Custody Seal Number:

Quality Assurance/Quality Control

A. Program Overview

Groundwater Analytical conducts an active Quality Assurance program to ensure the production of high quality, valid data. This program closely follows the guidance provided by *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans,* US EPA QAMS-005/80 (1980), and *Test Methods for Evaluating Solid Waste,* US EPA, SW-846, Update III (1996).

Quality Control protocols include written Standard Operating Procedures (SOPs) developed for each analytical method. SOPs are derived from US EPA methodologies and other established references. Standards are prepared from commercially obtained reference materials of certified purity, and documented for traceability.

Quality Assessment protocols for most organic analyses include a minimum of one laboratory control sample, one method blank, one matrix spike sample, and one sample duplicate for each sample preparation batch. All samples, standards, blanks, laboratory control samples, matrix spikes and sample duplicates are spiked with internal standards and surrogate compounds. All instrument sequences begin with an initial calibration verification standard and a blank; and excepting GC/MS sequences, all sequences close with a continuing calibration standard. GC/MS systems are tuned to appropriate ion abundance criteria daily, or for each 12 hour operating period, whichever is more frequent.

Quality Assessment protocols for most inorganic analyses include a minimum of one laboratory control sample, one method blank, one matrix spike sample, and one sample duplicate for each sample preparation batch. Standard curves are derived from one reagent blank and four concentration levels. Curve validity is verified by standard recoveries within plus or minus ten percent of the curve.

B. Definitions

Batches are used as the basic unit for Quality Assessment. A Batch is defined as twenty or fewer samples of the same matrix which are prepared together for the same analysis, using the same lots of reagents and the same techniques or manipulations, all within the same continuum of time, up to but not exceeding 24 hours.

Laboratory Control Samples are used to assess the accuracy of the analytical method. A Laboratory Control Sample consists of reagent water or sodium sulfate spiked with a group of target analytes representative of the method analytes. Accuracy is defined as the degree of agreement of the measured value with the true or expected value. Percent Recoveries for the Laboratory Control Samples are calculated to assess accuracy.

Method Blanks are used to assess the level of contamination present in the analytical system. Method Blanks consist of reagent water or an aliquot of sodium sulfate. Method Blanks are taken through all the appropriate steps of an analytical method. Sample data reported is not corrected for blank contamination.

Surrogate Compounds are used to assess the effectiveness of an analytical method in dealing with each sample matrix. Surrogate Compounds are organic compounds which are similar to the target analytes of interest in chemical behavior, but which are not normally found in environmental samples. Percent Recoveries are calculated for each Surrogate Compound.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Sample

Category:	**EPA 8015B Mod TPH**	Instrument ID:	**GC4 HP 5890**
QC Batch ID:	**HF-2210-F**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-14-10 01:32**
Units:	**mg/L**	Analyst:	**MB**

Analyte	Spiked	Measured	Recovery	QC Limits
Fuel Oil No. 2	2.0	1.7	**85** %	60 - 140 %

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
ortho-Terphenyl	0.040	0.037	**92** %	60 - 140 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified to quantify total petroleum hydrocarbons in the range n-C 9 through n-C 36. Results are quantified on the basis of a series of aromatic and aliphatic hydrocarbons, using 5-alpha-androstane as an internal standard.
Sample extraction performed by EPA Method 3510C.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category:	**EPA 8015B Mod TPH**	Instrument ID:	**GC4 HP 5890**
QC Batch ID:	**HF-2210-F**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-14-10 00:37**
		Analyst:	**MB**

Analyte	Concentration	Notes	Units	Reporting Limit
Total Petroleum Hydrocarbons	BRL		mg/L	0.2

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
ortho-Terphenyl	0.040	0.035	**87** %	60 - 140 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified to quantify total petroleum hydrocarbons in the range n-C 9 through n-C 36. Results are quantified on the basis of a series of aromatic and aliphatic hydrocarbons, using 5-alpha-androstane as an internal standard.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Laboratory Control Samples

Category: **Inorganics**
Matrix: **Aqueous**
Units: **mg/L**

Sample Type	Method	QC Batch ID	Prep Method	Prepared	Analyzed	Instrument ID	Analyst
LCS	EPA 9012A	TCN-1567-W	EPA 9012A	5/14/2010 8:00	5/15/2010 11:06	Lachat 8000 Autoanalyzer	JR
LCSD	EPA 9012A	TCN-1567-W	EPA 9012A	5/14/2010 8:00	5/15/2010 11:07	Lachat 8000 Autoanalyzer	JR

Analyte	LCS			LCS Duplicate				QC Limits		Method
	Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	LCS	RPD	
Cyanide, Total	0.45	0.49	**109%**	0.45	0.49	**110%**	**0 %**	80-120%	20 %	EPA 9012A

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996). Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised (1983), and Methods for the Determination of Metals in Environmental Samples, Supplement I, EPA-600/R-94-111, (1994), and 40 C.F.R. 136, Appendix C (1990).

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Sample

Category: **Inorganic Chemistry**
Matrix: **Aqueous**

Analyte	Units	Spiked	Measured	Recovery	QC Limits	Analyzed	QC Batch	Method	Inst	Analyst
Solids, Total Suspended	mg/L	98	100	**103 %**	80 - 120 %	05-14-10 13:33	TSS-1768-W	SM 2540 D	3	JR
Chlorine, Total Residual	mg/L	0.05	0.05	**106 %**	80 - 120 %	05-10-10 22:30	TRC-0860-W	SM 4500-Cl G	2	LD
Phenolics, Total	mg/L	8.0	9.4	**118 %**	80 - 120 %	05-17-10 09:03	PHN-2001-W	EPA 9096	1	JR
Chromium, Hexavalent	mg/L	0.10	0.09	**93 %**	80 - 120 %	02-19-03 00:00	HC-0188-W	EPA 7196A	2	GB
Cyanide, Total	mg/L	0.45	0.49	**109 %**	80 - 120 %	05-15-10 11:06	TCN-1567-W	EPA 9012A	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

1 Instrument ID: Lachat 8000 Autoanalyzer

2 Instrument ID: Thermo Electron Genesys 20

3 Instrument ID: Mettler AT 200 Balance

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: **Inorganic Chemistry**
Matrix: **Aqueous**

Analyte	Result	Units	RL	Analyzed	QC Batch	Method	Inst	Analyst
Solids, Total Suspended	BRL	mg/L	2	05-14-10 13:33	TSS-1768-W	SM 2540 D	3	JR
Chlorine, Total Residual	BRL	mg/L	0.02	05-10-10 22:30	TRC-0860-W	SM 4500-Cl G	2	LD
Phenolics, Total	BRL	mg/L	0.2	05-17-10 09:03	PHN-2001-W	EPA 9096	1	JR
Chromium, Hexavalent	BRL	mg/L	0.01	02-19-03 00:00	HC-0188-W	EPA 7196A	2	GB
Cyanide, Total	BRL	mg/L	0.01	05-15-10 11:06	TCN-1567-W	EPA 9012A	1	JR

Method Reference: Methods for Chemical Analysis of Water and Wastes, US EPA, EPA-600/4-790-020 (Revised 1983), and Methods for the Determination of Inorganic Substances in Environmental Samples, US EPA, EPA/600/R-93/100 (1993), and Standard Methods for the Examination of Water and Wastewater, APHA, Twentieth Edition (1998), and Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

RL Reporting Limit.

1 Instrument ID: Lachat 8000 Autoanalyzer

2 Instrument ID: Thermo Electron Genesys 20

3 Instrument ID: Mettler AT 200 Balance

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA 8082**	Instrument ID:	**GC-11 Agilent 6890**	Instrument ID:	**GC-11 Agilent 6890**
QC Batch ID:	**PB-2595-F**	Extracted:	**05-12-10 20:30**	Extracted:	**05-12-10 20:30**
Matrix:	**Aqueous**	Cleaned Up:	**05-13-10 00:30**	Cleaned Up:	**05-13-10 00:30**
Units:	**ug/L**	Analyzed:	**05-13-10 14:31**	Analyzed:	**05-13-10 14:54**
		Analyst:	**AWG**	Analyst:	**AWG**

CAS Number	Analyte	LCS					LCS Duplicate							QC Limits	
		Spiked	Measured		Recovery		Spiked	Measured		Recovery		RPD			
			1st Col	2nd Col	1st Col	2nd Col		1st Col	2nd Col	1st Col	2nd Col	1st Col	2nd Col	Spike	RPD
12674-11-2	Aroclor 1016	5.0	4.5	4.7	**90%**	**94%**	5.0	4.7	4.8	**93%**	**96%**	**4 %**	**2 %**	40 - 140%	30 %
11096-82-5	Aroclor 1260	5.0	4.9	4.8	**97%**	**97%**	5.0	4.9	4.9	**99%**	**98%**	**2 %**	**1 %**	40 - 140%	30 %

QC Surrogate Compound	Surrogate Recovery											QC Limits
Tetrachloro-*m* -xylene	0.20	0.16	0.17	**80%**	**83%**	0.20	0.16	0.17	**82%**	**86%**		30 - 150 %
Decachlorobiphenyl	0.20	0.22	0.24	**108%**	**118%**	0.20	0.20	0.23	**102%**	**116%**		30 - 150 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C. Cleanup performed by EPA Method 3660B and EPA Method 3665A.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category:	**EPA Method 8082**	Instrument ID:	**GC-11 Agilent 6890**
QC Batch ID:	**PB-2595-F**	Extracted:	**05-12-10 20:30**
Matrix:	**Aqueous**	Cleaned Up:	**05-13-10 00:30**
		Analyzed:	**05-13-10 14:07**
		Analyst:	**AWG**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
12674-11-2	Aroclor 1016	BRL		ug/L	0.2
11104-28-2	Aroclor 1221	BRL		ug/L	0.2
11141-16-5	Aroclor 1232	BRL		ug/L	0.2
53469-21-9	Aroclor 1242	BRL		ug/L	0.2
12672-29-6	Aroclor 1248	BRL		ug/L	0.2
11097-69-1	Aroclor 1254	BRL		ug/L	0.2
11096-82-5	Aroclor 1260	BRL		ug/L	0.2
37324-23-5	Aroclor 1262 †	BRL		ug/L	0.2
11100-14-4	Aroclor 1268 †	BRL		ug/L	0.2

QC Surrogate Compound		Spiked	Measured	Recovery	QC Limits
First	Tetrachloro-*m*-xylene	0.20	0.17	**84** %	30 - 150 %
Column	Decachlorobiphenyl	0.20	0.20	**100** %	30 - 150 %
Second	Tetrachloro-*m*-xylene	0.20	0.17	**84** %	30 - 150 %
Column	Decachlorobiphenyl	0.20	0.22	**108** %	30 - 150 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C. Cleanup performed by EPA Method 3660B and EPA Method 3665A.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

† Non-target analyte. Result is based on a single mid-range calibration standard.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Sample

Category:	**EPA Method 504.1**	Instrument ID:	**GC-6 HP 5890**
QC Batch ID:	**PV-0987-E**	Extracted:	**05-13-10 16:45**
Matrix:	**Aqueous**	Analyzed:	**05-13-10 21:02**
Units:	**ug/L**	Analyst:	**AWG**

CAS Number	Analyte	Spiked	Measured		Recovery		QC Limits
			1st Column	2nd Column	1st Column	2nd Column	
106-93-4	1,2-Dibromoethane (EDB)	0.20	0.20	0.22	**101** %	**109** %	70 - 130 %
96-12-8	1,2-Dibromo-3-Chloropropane (DBC	0.20	0.20	0.20	**98** %	**102** %	70 - 130 %

Method Reference: Methods for the Determination of Organic Compounds in Drinking Water, Supplement III, US EPA, EPA-600/R-95/131 (1995). Method Revision 1.1.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category:	**EPA Method 504.1**	Instrument ID:	**GC-6 HP 5890**
QC Batch ID:	**PV-0987-E**	Extracted:	**05-13-10 16:45**
Matrix:	**Aqueous**	Analyzed:	**05-13-10 22:33**
		Analyst:	**AWG**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.02
96-12-8	1,2-Dibromo-3-Chloropropane (DBCP)	BRL		ug/L	0.02

Method Reference: Methods for the Determination of Organic Compounds in Drinking Water, Supplement III, US EPA, EPA-600/R-95/131 (1995). Method Revision 1.1.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

Category: **Metals**
Matrix: **Aqueous**
Units: **mg/L**

Sample Type	Method	QC Batch ID	Prep Method	Prepared	Analyzed	Instrument ID	Analyst
LCS	EPA 6020A	MB-4068-WL	EPA 3010A	05-12-10 00:00	05-12-10 16:59	ICPMS-1 ELAN 9000	JK
LCS	EPA 6010B	MB-4068-WL	EPA 3010A	05-12-10 00:00	05-12-10 17:53	ICP-1 PE 3000	JK
LCS	EPA 7470A	MP-2284-WL	EPA 7470A	05-12-10 00:00	05-13-10 13:47	CVAA-1 PE FIMS	MP
LCSD	EPA 6020A	MB-4068-WL	EPA 3010A	05-12-10 00:00	05-13-10 13:50	ICPMS-1 ELAN 9000	JK
LCSD	EPA 6010B	MB-4068-WL	EPA 3010A	05-12-10 00:00	05-12-10 18:08	ICP-1 PE 3000	JK
LCSD	EPA 7470A	MP-2284-WL	EPA 7470A	05-12-10 00:00	05-13-10 13:50	CVAA-1 PE FIMS	MP

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits		Method
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	LCS	RPD	
7440-36-0	Antimony	5.0	5.0	**100%**	5.0	4.9	**98%**	**1 %**	80-120 %	20 %	EPA 6020A
7440-38-2	Arsenic	5.0	5.0	**100%**	5.0	4.6	**93%**	**4 %**	80-120 %	20 %	EPA 6020A
7440-43-9	Cadmium	1.0	1.0	**103%**	1.0	0.99	**99%**	**2 %**	80-120 %	20 %	EPA 6010B
7440-47-3	Chromium	1.0	1.0	**101%**	1.0	0.97	**97%**	**2 %**	80-120 %	20 %	EPA 6010B
7440-50-8	Copper	1.0	1.0	**104%**	1.0	1.0	**100%**	**2 %**	80-120 %	20 %	EPA 6010B
7439-89-6	Iron	5.0	4.7	**94%**	5.0	4.9	**99%**	**3 %**	80-120 %	20 %	EPA 6010B
7439-92-1	Lead	5.0	4.8	**96%**	5.0	4.6	**92%**	**2 %**	80-120 %	20 %	EPA 6020A
7439-97-6	Mercury	0.0010	0.0011	**113%**	0.0010	0.0011	**110%**	**1 %**	80-120 %	20 %	EPA 7470A
7440-02-0	Nickel	1.0	0.99	**99%**	1.0	1.0	**101%**	**1 %**	80-120 %	20 %	EPA 6010B
7782-49-2	Selenium	5.0	5.0	**101%**	5.0	4.9	**97%**	**2 %**	80-120 %	20 %	EPA 6020A
7440-22-4	Silver	1.0	1.1	**105%**	1.0	1.0	**102%**	**1 %**	80-120 %	20 %	EPA 6010B
7440-66-6	Zinc	1.0	0.99	**99%**	1.0	0.95	**95%**	**2 %**	80-120 %	20 %	EPA 6010B

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: **Metals**
Matrix: **Aqueous**

Analysis Method	QC Batch ID	Prep Method	Prepared	Sample Volume	Instrument ID	Analyst
EPA 6020A	MB-4068-WB	EPA 3010A	05-12-10 00:00	50 mL	ICPMS-1 ELAN 9000	JK
EPA 6010B	MB-4068-WB	EPA 3010A	05-12-10 00:00	50 mL	ICP-1 PE 3000	JK
EPA 7470A	MP-2284-WB	EPA 7470A	05-12-10 00:00	25 mL	CVAA-1 PE FIMS	MP

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit	DF	Analyzed	Method
7440-36-0	Antimony	BRL		mg/L	0.006	1	05-12-10 16:59	EPA 6020A
7440-38-2	Arsenic	BRL		mg/L	0.005	1	05-12-10 16:59	EPA 6020A
7440-43-9	Cadmium	BRL		mg/L	0.004	1	05-12-10 17:49	EPA 6010B
7440-47-3	Chromium	BRL		mg/L	0.01	1	05-12-10 17:49	EPA 6010B
7440-50-8	Copper	BRL		mg/L	0.025	1	05-12-10 17:49	EPA 6010B
7439-89-6	Iron	BRL		mg/L	0.1	1	05-12-10 17:49	EPA 6010B
7439-92-1	Lead	BRL		mg/L	0.005	1	05-12-10 16:59	EPA 6020A
7439-97-6	Mercury	BRL		mg/L	0.0002	1	05-13-10 13:47	EPA 7470A
7440-02-0	Nickel	BRL		mg/L	0.04	1	05-12-10 17:49	EPA 6010B
7782-49-2	Selenium	BRL		mg/L	0.005	1	05-12-10 16:59	EPA 6020A
7440-22-4	Silver	BRL		mg/L	0.007	1	05-12-10 17:49	EPA 6010B
7440-66-6	Zinc	BRL		mg/L	0.05	1	05-12-10 17:49	EPA 6010B

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

DF Dilution Factor.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA Method 8260B**	Instrument ID:	**MS-10 HP 6890**	Instrument ID:	**MS-10 HP 6890**
QC Batch ID:	**VM10-1115-W**	Analyzed:	**05-13-10 07:39**	Analyzed:	**05-13-10 08:02**
Matrix:	**Aqueous**	Analyst:	**LMG**	Analyst:	**LMG**
Units:	**ug/L**				

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits	
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	Spike	RPD
75-71-8	Dichlorodifluoromethane	10	8.0	**80** %	10	8.2	**82** %	**2** %	70 - 130 %	25%
74-87-3	Chloromethane	10	8.8	**88** %	10	8.6	**86** %	**2** %	70 - 130 %	25%
75-01-4	Vinyl Chloride	10	9.3	**93** %	10	9.1	**91** %	**2** %	70 - 130 %	25%
74-83-9	Bromomethane	10	11	**105** %	10	10	**102** %	**3** %	70 - 130 %	25%
75-00-3	Chloroethane	10	11	**111** %	10	11	**110** %	**1** %	70 - 130 %	25%
75-69-4	Trichlorofluoromethane	10	8.5	**85** %	10	8.6	**86** %	**2** %	70 - 130 %	25%
60-29-7	Diethyl Ether	20	21	**107** %	20	21	**106** %	**1** %	70 - 130 %	25%
75-35-4	1,1-Dichloroethene	10	10	**104** %	10	10	**100** %	**4** %	70 - 130 %	25%
76-13-1	1,1,2-Trichlorotrifluoroethane	20	21	**106** %	20	21	**105** %	**1** %	70 - 130 %	25%
67-64-1	Acetone	20	25	**123** %	20	25	**123** %	**0** %	70 - 130 %	25%
75-15-0	Carbon Disulfide	20	20	**102** %	20	20	**101** %	**1** %	70 - 130 %	25%
75-09-2	Methylene Chloride	10	11	**115** %	10	11	**110** %	**4** %	70 - 130 %	25%
107-13-1	Acrylonitrile	10	13	**129** %	10	13	**125** %	**3** %	70 - 130 %	25%
156-60-5	*trans*-1,2-Dichloroethene	10	10	**105** %	10	11	**107** %	**2** %	70 - 130 %	25%
1634-04-4	Methyl *tert*-butyl Ether (MTBE)	10	9.8	**98** %	10	9.7	**97** %	**2** %	70 - 130 %	25%
75-34-3	1,1-Dichloroethane	10	9.8	**98** %	10	9.9	**99** %	**1** %	70 - 130 %	25%
594-20-7	2,2-Dichloropropane	10	8.7	**87** %	10	8.9	**89** %	**2** %	70 - 130 %	25%
156-59-2	*cis*-1,2-Dichloroethene	10	11	**112** %	10	11	**111** %	**0** %	70 - 130 %	25%
78-93-3	2-Butanone (MEK)	20	18	**90** %	20	18	**92** %	**3** %	70 - 130 %	25%
74-97-5	Bromochloromethane	10	11	**107** %	10	10	**104** %	**4** %	70 - 130 %	25%
109-99-9	Tetrahydrofuran (THF)	20	20	**99** %	20	19	**95** %	**4** %	70 - 130 %	25%
67-66-3	Chloroform	10	9.2	**92** %	10	9.1	**91** %	**1** %	70 - 130 %	25%
71-55-6	1,1,1-Trichloroethane	10	8.7	**87** %	10	8.9	**89** %	**2** %	70 - 130 %	25%
56-23-5	Carbon Tetrachloride	10	8.9	**89** %	10	9.0	**90** %	**1** %	70 - 130 %	25%
563-58-6	1,1-Dichloropropene	10	9.7	**97** %	10	9.9	**99** %	**2** %	70 - 130 %	25%
71-43-2	Benzene	10	11	**106** %	10	10	**105** %	**1** %	70 - 130 %	25%
107-06-2	1,2-Dichloroethane	10	8.3	**83** %	10	8.1	**81** %	**2** %	70 - 130 %	25%
79-01-6	Trichloroethene	10	9.5	**95** %	10	9.3	**93** %	**2** %	70 - 130 %	25%
78-87-5	1,2-Dichloropropane	10	9.8	**98** %	10	10	**101** %	**3** %	70 - 130 %	25%
74-95-3	Dibromomethane	10	9.6	**96** %	10	9.6	**96** %	**0** %	70 - 130 %	25%
75-27-4	Bromodichloromethane	10	9.1	**91** %	10	9.2	**92** %	**1** %	70 - 130 %	25%
123-91-1	1,4-Dioxane	200	280	**138** % q	200	250	**124** %	**11** %	70 - 130 %	25%
10061-01-5	*cis*-1,3-Dichloropropene	10	9.5	**95** %	10	9.7	**97** %	**3** %	70 - 130 %	25%
108-10-1	4-Methyl-2-Pentanone (MIBK)	20	20	**98** %	20	19	**96** %	**2** %	70 - 130 %	25%
108-88-3	Toluene	10	11	**107** %	10	11	**109** %	**1** %	70 - 130 %	25%
10061-02-6	*trans*-1,3-Dichloropropene	10	9.5	**95** %	10	9.5	**95** %	**0** %	70 - 130 %	25%
79-00-5	1,1,2-Trichloroethane	10	12	**116** %	10	11	**113** %	**3** %	70 - 130 %	25%
127-18-4	Tetrachloroethene	10	12	**121** %	10	12	**122** %	**1** %	70 - 130 %	25%
142-28-9	1,3-Dichloropropane	10	11	**112** %	10	11	**112** %	**1** %	70 - 130 %	25%
591-78-6	2-Hexanone	20	21	**104** %	20	20	**101** %	**3** %	70 - 130 %	25%
124-48-1	Dibromochloromethane	10	10	**103** %	10	10	**105** %	**2** %	70 - 130 %	25%
106-93-4	1,2-Dibromoethane (EDB)	10	12	**118** %	10	12	**117** %	**1** %	70 - 130 %	25%
108-90-7	Chlorobenzene	10	12	**118** %	10	12	**116** %	**1** %	70 - 130 %	25%
630-20-6	1,1,1,2-Tetrachloroethane	10	10	**104** %	10	10	**102** %	**2** %	70 - 130 %	25%
100-41-4	Ethylbenzene	10	12	**120** %	10	12	**119** %	**0** %	70 - 130 %	25%
108-38-3/106-42-3	*meta*-Xylene and *para*-Xylene	20	25	**125** %	20	25	**123** %	**2** %	70 - 130 %	25%
95-47-6	*ortho*-Xylene	10	12	**119** %	10	12	**120** %	**1** %	70 - 130 %	25%
100-42-5	Styrene	10	12	**120** %	10	12	**119** %	**1** %	70 - 130 %	25%
75-25-2	Bromoform	10	10	**104** %	10	10	**102** %	**2** %	70 - 130 %	25%

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA Method 8260B**	Instrument ID:	**MS-10 HP 6890**	Instrument ID:	**MS-10 HP 6890**
QC Batch ID:	**VM10-1115-W**	Analyzed:	**05-13-10 07:39**	Analyzed:	**05-13-10 08:02**
Matrix:	**Aqueous**	Analyst:	**LMG**	Analyst:	**LMG**
Units:	**ug/L**				

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits	
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	Spike	RPD
98-82-8	Isopropylbenzene	10	9.4	**94** %	10	9.4	**94** %	**0** %	70 - 130 %	25%
108-86-1	Bromobenzene	10	11	**107** %	10	11	**105** %	**2** %	70 - 130 %	25%
79-34-5	1,1,2,2-Tetrachloroethane	10	11	**105** %	10	10	**102** %	**3** %	70 - 130 %	25%
96-18-4	1,2,3-Trichloropropane	10	10	**101** %	10	9.9	**99** %	**2** %	70 - 130 %	25%
110-57-6	*trans*-1,4-Dichloro-2-butene	200	170	**83** %	200	190	**93** %	**11** %	70 - 130 %	25%
103-65-1	*n*-Propylbenzene	10	11	**107** %	10	11	**107** %	**0** %	70 - 130 %	25%
95-49-8	2-Chlorotoluene	10	11	**107** %	10	11	**106** %	**2** %	70 - 130 %	25%
108-67-8	1,3,5-Trimethylbenzene	10	10	**103** %	10	10	**103** %	**0** %	70 - 130 %	25%
106-43-4	4-Chlorotoluene	10	11	**106** %	10	11	**105** %	**1** %	70 - 130 %	25%
98-06-6	*tert*-Butylbenzene	10	9.4	**94** %	10	9.4	**94** %	**0** %	70 - 130 %	25%
95-63-6	1,2,4-Trimethylbenzene	10	9.5	**95** %	10	9.4	**94** %	**1** %	70 - 130 %	25%
135-98-8	*sec*-Butylbenzene	10	9.6	**96** %	10	9.6	**96** %	**1** %	70 - 130 %	25%
541-73-1	1,3-Dichlorobenzene	10	10	**102** %	10	10	**103** %	**2** %	70 - 130 %	25%
99-87-6	4-Isopropyltoluene	10	9.3	**93** %	10	9.3	**93** %	**0** %	70 - 130 %	25%
106-46-7	1,4-Dichlorobenzene	10	10	**101** %	10	10	**101** %	**0** %	70 - 130 %	25%
95-50-1	1,2-Dichlorobenzene	10	10	**100** %	10	10	**100** %	**0** %	70 - 130 %	25%
104-51-8	*n*-Butylbenzene	10	9.2	**92** %	10	9.4	**94** %	**2** %	70 - 130 %	25%
96-12-8	1,2-Dibromo-3-chloropropane	10	7.3	**73** %	10	7.2	**72** %	**2** %	70 - 130 %	25%
108-70-3	1,3,5-Trichlorobenzene	10	9.8	**98** %	10	9.8	**98** %	**1** %	70 - 130 %	25%
120-82-1	1,2,4-Trichlorobenzene	10	9.6	**96** %	10	9.4	**94** %	**2** %	70 - 130 %	25%
87-68-3	Hexachlorobutadiene	10	8.6	**86** %	10	8.6	**86** %	**1** %	70 - 130 %	25%
91-20-3	Naphthalene	10	8.8	**88** %	10	8.7	**87** %	**1** %	70 - 130 %	25%
87-61-6	1,2,3-Trichlorobenzene	10	9.5	**95** %	10	9.6	**96** %	**1** %	70 - 130 %	25%
75-65-0	*tert*-Butyl Alcohol (TBA)	200	180	**92** %	200	170	**87** %	**5** %	70 - 130 %	25%
108-20-3	Di-isopropyl Ether (DIPE)	10	11	**105** %	10	10	**105** %	**1** %	70 - 130 %	25%
637-92-3	Ethyl *tert*-butyl Ether (ETBE)	10	10	**101** %	10	9.9	**99** %	**2** %	70 - 130 %	25%
994-05-8	*tert*-Amyl Methyl Ether (TAME)	10	9.5	**95** %	10	9.6	**96** %	**0** %	70 - 130 %	25%

QC Surrogate Compound	Spiked	Measured	Recovery	Spiked	Measured	Recovery		QC Limits
Dibromofluoromethane	10	11	**108** %	10	10	**104** %		70 - 130 %
1,2-Dichloroethane-d_4	10	11	**112** %	10	11	**109** %		70 - 130 %
Toluene-d_8	10	12	**120** %	10	12	**117** %		70 - 130 %
4-Bromofluorobenzene	10	11	**112** %	10	11	**110** %		70 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996). Sample preparation performed by EPA Method 5030B.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

q Recovery outside recommended limits.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: **EPA Method 8260B**
QC Batch ID: **VM10-1115-W**
Matrix: **Aqueous**

Instrument ID: **MS-10 HP 6890**
Analyzed: **05-13-10 08:25**
Analyst: **LMG**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
75-71-8	Dichlorodifluoromethane	BRL		ug/L	0.5
74-87-3	Chloromethane	BRL		ug/L	0.5
75-01-4	Vinyl Chloride	BRL		ug/L	0.5
74-83-9	Bromomethane	BRL		ug/L	0.5
75-00-3	Chloroethane	BRL		ug/L	0.5
75-69-4	Trichlorofluoromethane	BRL		ug/L	0.5
60-29-7	Diethyl Ether	BRL		ug/L	2
75-35-4	1,1-Dichloroethene	BRL		ug/L	0.5
76-13-1	1,1,2-Trichlorotrifluoroethane	BRL		ug/L	5
67-64-1	Acetone	BRL		ug/L	10
75-15-0	Carbon Disulfide	BRL		ug/L	5
75-09-2	Methylene Chloride	BRL		ug/L	3
107-13-1	Acrylonitrile	BRL		ug/L	0.5
156-60-5	*trans*-1,2-Dichloroethene	BRL		ug/L	0.5
1634-04-4	Methyl *tert*-butyl Ether (MTBE)	BRL		ug/L	0.5
75-34-3	1,1-Dichloroethane	BRL		ug/L	0.5
594-20-7	2,2-Dichloropropane	BRL		ug/L	0.5
156-59-2	*cis*-1,2-Dichloroethene	BRL		ug/L	0.5
78-93-3	2-Butanone (MEK)	BRL		ug/L	5
74-97-5	Bromochloromethane	BRL		ug/L	0.5
109-99-9	Tetrahydrofuran (THF)	BRL		ug/L	5
67-66-3	Chloroform	BRL		ug/L	0.5
71-55-6	1,1,1-Trichloroethane	BRL		ug/L	0.5
56-23-5	Carbon Tetrachloride	BRL		ug/L	0.5
563-58-6	1,1-Dichloropropene	BRL		ug/L	0.5
71-43-2	Benzene	BRL		ug/L	0.5
107-06-2	1,2-Dichloroethane	BRL		ug/L	0.5
79-01-6	Trichloroethene	BRL		ug/L	0.5
78-87-5	1,2-Dichloropropane	BRL		ug/L	0.5
74-95-3	Dibromomethane	BRL		ug/L	0.5
75-27-4	Bromodichloromethane	BRL		ug/L	0.5
123-91-1	1,4-Dioxane	BRL		ug/L	500
10061-01-5	*cis*-1,3-Dichloropropene	BRL		ug/L	0.4
108-10-1	4-Methyl-2-Pentanone (MIBK)	BRL		ug/L	5
108-88-3	Toluene	BRL		ug/L	0.5
10061-02-6	*trans*-1,3-Dichloropropene	BRL		ug/L	0.4
79-00-5	1,1,2-Trichloroethane	BRL		ug/L	0.5
127-18-4	Tetrachloroethene	BRL		ug/L	0.5
142-28-9	1,3-Dichloropropane	BRL		ug/L	0.5
591-78-6	2-Hexanone	BRL		ug/L	5
124-48-1	Dibromochloromethane	BRL		ug/L	0.5
106-93-4	1,2-Dibromoethane (EDB)	BRL		ug/L	0.5
108-90-7	Chlorobenzene	BRL		ug/L	0.5
630-20-6	1,1,1,2-Tetrachloroethane	BRL		ug/L	0.5
100-41-4	Ethylbenzene	BRL		ug/L	0.5
108-38-3/106-42-3	*meta*-Xylene and *para*-Xylene	BRL		ug/L	0.5
95-47-6	*ortho*-Xylene	BRL		ug/L	0.5
100-42-5	Styrene	BRL		ug/L	0.5
75-25-2	Bromoform	BRL		ug/L	0.5

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: **EPA Method 8260B**
QC Batch ID: **VM10-1115-W**
Matrix: **Aqueous**
Instrument ID: **MS-10 HP 6890**
Analyzed: **05-13-10 08:25**
Analyst: **LMG**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
98-82-8	Isopropylbenzene	BRL		ug/L	0.5
108-86-1	Bromobenzene	BRL		ug/L	0.5
79-34-5	1,1,2,2-Tetrachloroethane	BRL		ug/L	0.5
96-18-4	1,2,3-Trichloropropane	BRL		ug/L	0.5
110-57-6	*trans*-1,4-Dichloro-2-butene	BRL		ug/L	25
103-65-1	*n*-Propylbenzene	BRL		ug/L	0.5
95-49-8	2-Chlorotoluene	BRL		ug/L	0.5
108-67-8	1,3,5-Trimethylbenzene	BRL		ug/L	0.5
106-43-4	4-Chlorotoluene	BRL		ug/L	0.5
98-06-6	*tert*-Butylbenzene	BRL		ug/L	0.5
95-63-6	1,2,4-Trimethylbenzene	BRL		ug/L	0.5
135-98-8	*sec*-Butylbenzene	BRL		ug/L	0.5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	0.5
99-87-6	4-Isopropyltoluene	BRL		ug/L	0.5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	0.5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	0.5
104-51-8	*n*-Butylbenzene	BRL		ug/L	0.5
96-12-8	1,2-Dibromo-3-chloropropane	BRL		ug/L	0.5
108-70-3	1,3,5-Trichlorobenzene	BRL		ug/L	0.5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	0.5
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
91-20-3	Naphthalene	BRL		ug/L	0.5
87-61-6	1,2,3-Trichlorobenzene	BRL		ug/L	0.5
75-65-0	*tert*-Butyl Alcohol (TBA)	BRL		ug/L	20
108-20-3	Di-isopropyl Ether (DIPE)	BRL		ug/L	0.5
637-92-3	Ethyl *tert*-butyl Ether (ETBE)	BRL		ug/L	0.5
994-05-8	*tert*-Amyl Methyl Ether (TAME)	BRL		ug/L	0.5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
Dibromofluoromethane	10	11	**107** %	70 - 130 %
1,2-Dichloroethane-d_4	10	11	**112** %	70 - 130 %
Toluene-d_8	10	12	**117** %	70 - 130 %
4-Bromofluorobenzene	10	11	**107** %	70 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996). Sample preparation performed by EPA Method 5030B.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA 8270C (Part 1)**	Instrument ID:	**MS-3 HP 5890**	Instrument ID:	**MS-3 HP 5890**
QC Batch ID:	**SV-2507-F**	Extracted:	**05-13-10 16:00**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-17-10 08:46**	Analyzed:	**05-17-10 09:27**
Units:	**ug/L**	Analyst:	**MJB**	Analyst:	**MJB**

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits	
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	Spike	RPD
62-75-9	N-Nitrosodimethylamine	50	29	**57** %	50	30	**61** %	**6** %	40 - 140 %	25%
110-86-1	Pyridine	50	25	**49** %	50	25	**50** %	**2** %	40 - 140 %	25%
108-95-2	Phenol	50	24	**49** %	50	26	**51** %	**5** %	30 - 130 %	25%
62-53-3	Aniline	50	36	**72** %	50	41	**83** %	**14** %	40 - 140 %	25%
111-44-4	Bis(2-chloroethyl) ether	50	34	**67** %	50	36	**73** %	**8** %	40 - 140 %	25%
95-57-8	2-Chlorophenol	50	37	**75** %	50	39	**79** %	**5** %	30 - 130 %	25%
541-73-1	1,3-Dichlorobenzene	50	36	**72** %	50	38	**76** %	**5** %	40 - 140 %	25%
106-46-7	1,4-Dichlorobenzene	50	36	**71** %	50	37	**74** %	**3** %	40 - 140 %	25%
100-51-6	Benzyl Alcohol	50	37	**74** %	50	40	**79** %	**6** %	30 - 130 %	25%
95-50-1	1,2-Dichlorobenzene	50	35	**69** %	50	35	**70** %	**1** %	40 - 140 %	25%
95-48-7	2-Methylphenol	50	36	**72** %	50	38	**75** %	**4** %	30 - 130 %	25%
108-60-1	Bis(2-chloroisopropyl) ether	50	32	**64** %	50	34	**68** %	**5** %	40 - 140 %	25%
106-44-5	4-Methylphenol	50	36	**73** %	50	38	**77** %	**6** %	30 - 130 %	25%
621-64-7	N-Nitrosodi-n-propylamine	50	36	**73** %	50	38	**76** %	**4** %	40 - 140 %	25%
98-86-2	Acetophenone	50	40	**80** %	50	42	**85** %	**6** %	40 - 140 %	25%
67-72-1	Hexachloroethane	50	34	**69** %	50	37	**74** %	**7** %	40 - 140 %	25%
98-95-3	Nitrobenzene	50	36	**73** %	50	32	**64** %	**12** %	40 - 140 %	25%
78-59-1	Isophorone	50	38	**75** %	50	33	**66** %	**14** %	40 - 140 %	25%
88-75-5	2-Nitrophenol	50	42	**85** %	50	38	**76** %	**11** %	30 - 130 %	25%
105-67-9	2,4-Dimethylphenol	50	37	**74** %	50	32	**65** %	**14** %	30 - 130 %	25%
111-91-1	Bis(2-chloroethoxy) methane	50	38	**77** %	50	33	**67** %	**13** %	40 - 140 %	25%
120-83-2	2,4-Dichlorophenol	50	41	**81** %	50	36	**72** %	**13** %	30 - 130 %	25%
120-82-1	1,2,4-Trichlorobenzene	50	38	**76** %	50	34	**68** %	**11** %	40 - 140 %	25%
106-47-8	4-Chloroaniline	50	40	**79** %	50	35	**69** %	**13** %	40 - 140 %	25%
87-68-3	Hexachlorobutadiene	50	38	**76** %	50	33	**67** %	**12** %	40 - 140 %	25%
59-50-7	4-Chloro-3-methylphenol	50	43	**86** %	50	38	**76** %	**12** %	30 - 130 %	25%
77-47-4	Hexachlorocyclopentadiene	50	34	**69** %	50	36	**73** %	**6** %	40 - 140 %	25%
88-06-2	2,4,6-Trichlorophenol	50	42	**84** %	50	43	**86** %	**2** %	30 - 130 %	25%
95-95-4	2,4,5-Trichlorophenol	50	42	**84** %	50	43	**86** %	**3** %	30 - 130 %	25%
91-58-7	2-Chloronaphthalene	50	40	**79** %	50	40	**80** %	**1** %	40 - 140 %	25%
88-74-4	2-Nitroaniline	50	40	**80** %	50	41	**82** %	**3** %	40 - 140 %	25%
100-25-4	1,4-Dinitrobenzene	50	46	**93** %	50	49	**98** %	**6** %	40 - 140 %	25%
131-11-3	Dimethyl phthalate	50	42	**85** %	50	44	**87** %	**3** %	40 - 140 %	25%
99-65-0	1,3-Dinitrobenzene	50	46	**91** %	50	48	**97** %	**6** %	40 - 140 %	25%
606-20-2	2,6-Dinitrotoluene	50	44	**87** %	50	46	**92** %	**5** %	40 - 140 %	25%
528-29-0	1,2-Dinitrobenzene	50	44	**89** %	50	47	**94** %	**6** %	40 - 140 %	25%
99-09-2	3-Nitroaniline	50	43	**85** %	50	45	**91** %	**6** %	40 - 140 %	25%
51-28-5	2,4-Dinitrophenol	50	48	**96** %	50	51	**103** %	**7** %	30 - 130 %	25%
100-02-7	4-Nitrophenol	50	28	**55** %	50	30	**60** %	**9** %	30 - 130 %	25%
132-64-9	Dibenzofuran	50	41	**82** %	50	41	**83** %	**1** %	40 - 140 %	25%
121-14-2	2,4-Dinitrotoluene	50	46	**92** %	50	49	**97** %	**5** %	40 - 140 %	25%
84-66-2	Diethyl phthalate	50	43	**86** %	50	44	**88** %	**3** %	40 - 140 %	25%
7005-72-3	4-Chlorophenyl phenyl ether	50	42	**84** %	50	42	**85** %	**1** %	40 - 140 %	25%
100-01-6	4-Nitroaniline	50	41	**82** %	50	42	**83** %	**2** %	40 - 140 %	25%
534-52-1	4,6-Dinitro-2-methylphenol	50	48	**96** %	50	51	**102** %	**7** %	30 - 130 %	25%
86-30-6	N-Nitrosodiphenylamine †	50	42	**84** %	50	42	**84** %	**1** %	40 - 140 %	25%
122-66-7	1,2-Diphenylhydrazine à	50	39	**78** %	50	39	**78** %	**1** %	40 - 140 %	25%
101-55-3	4-Bromophenyl phenyl ether	50	44	**88** %	50	45	**90** %	**3** %	40 - 140 %	25%

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA 8270C (Part 1)**	Instrument ID:	**MS-3 HP 5890**	Instrument ID:	**MS-3 HP 5890**
QC Batch ID:	**SV-2507-F**	Extracted:	**05-13-10 16:00**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-17-10 08:46**	Analyzed:	**05-17-10 09:27**
Units:	**ug/L**	Analyst:	**MJB**	Analyst:	**MJB**

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits	
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	Spike	RPD
86-74-8	Carbazole	50	44	**88** %	50	45	**90** %	**2** %	40 - 140 %	25%
84-74-2	Di-*n*-butyl phthalate	50	45	**89** %	50	45	**90** %	**0** %	40 - 140 %	25%
85-68-7	Butyl benzyl phthalate	50	45	**90** %	50	47	**95** %	**6** %	40 - 140 %	25%
91-94-1	3,3'-Dichlorobenzidine	50	49	**97** %	50	50	**101** %	**3** %	40 - 140 %	25%
117-81-7	Bis(2-ethylhexyl) phthalate	50	45	**90** %	50	47	**94** %	**4** %	40 - 140 %	25%
117-84-0	Di-*n*-octyl phthalate	50	47	**95** %	50	51	**102** %	**7** %	40 - 140 %	25%

QC Surrogate Compound	Spiked	Measured	Recovery	Spiked	Measured	Recovery		QC Limits
2-Fluorophenol	20	11	**53** %	20	11	**57** %		15 - 110 %
Phenol-d5	20	8.9	**44** %	20	9.4	**47** %		15 - 110 %
Nitrobenzene-d5	10	9.6	**96** %	10	8.4	**84** %		30 - 130 %
2-Fluorobiphenyl	10	7.9	**79** %	10	8.5	**85** %		30 - 130 %
2,4,6-Tribromophenol	20	17	**86** %	20	19	**95** %		15 - 110 %
Terphenyl-d14	10	8.4	**84** %	10	9.0	**91** %		30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996). Sample extraction performed by EPA Method 3510C.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

† Reported as sum of N-Nitrosodiphenylamine and Diphenylamine.

◊ Analyzed as Azobenzene.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: **EPA Method 8270C (Part 1)**
QC Batch ID: **SV-2507-F**
Matrix: **Aqueous**

Instrument ID: **MS-3 HP 5890**
Extracted: **05-13-10 16:00**
Analyzed: **05-17-10 10:08**
Analyst: **MJB**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
62-75-9	N-Nitrosodimethylamine	BRL		ug/L	5
110-86-1	Pyridine	BRL		ug/L	5
108-95-2	Phenol	BRL		ug/L	5
62-53-3	Aniline	BRL		ug/L	5
111-44-4	Bis(2-chloroethyl) ether	BRL		ug/L	5
95-57-8	2-Chlorophenol	BRL		ug/L	5
541-73-1	1,3-Dichlorobenzene	BRL		ug/L	5
106-46-7	1,4-Dichlorobenzene	BRL		ug/L	5
100-51-6	Benzyl Alcohol	BRL		ug/L	5
95-50-1	1,2-Dichlorobenzene	BRL		ug/L	5
95-48-7	2-Methylphenol	BRL		ug/L	5
108-60-1	Bis(2-chloroisopropyl) ether	BRL		ug/L	5
108-39-4/106-44-5	3 and 4-Methylphenol *	BRL		ug/L	5
621-64-7	N-Nitrosodi-n-propylamine	BRL		ug/L	5
98-86-2	Acetophenone	BRL		ug/L	5
67-72-1	Hexachloroethane	BRL		ug/L	5
98-95-3	Nitrobenzene	BRL		ug/L	5
78-59-1	Isophorone	BRL		ug/L	5
88-75-5	2-Nitrophenol	BRL		ug/L	5
105-67-9	2,4-Dimethylphenol	BRL		ug/L	5
111-91-1	Bis(2-chloroethoxy) methane	BRL		ug/L	5
120-83-2	2,4-Dichlorophenol	BRL		ug/L	5
120-82-1	1,2,4-Trichlorobenzene	BRL		ug/L	5
106-47-8	4-Chloroaniline	BRL		ug/L	5
87-68-3	Hexachlorobutadiene	BRL		ug/L	5
59-50-7	4-Chloro-3-methylphenol	BRL		ug/L	5
77-47-4	Hexachlorocyclopentadiene	BRL		ug/L	5
88-06-2	2,4,6-Trichlorophenol	BRL		ug/L	5
95-95-4	2,4,5-Trichlorophenol	BRL		ug/L	5
91-58-7	2-Chloronaphthalene	BRL		ug/L	5
88-74-4	2-Nitroaniline	BRL		ug/L	5
100-25-4	1,4-Dinitrobenzene	BRL		ug/L	5
131-11-3	Dimethyl phthalate	BRL		ug/L	5
99-65-0	1,3-Dinitrobenzene	BRL		ug/L	5
606-20-2	2,6-Dinitrotoluene	BRL		ug/L	5
528-29-0	1,2-Dinitrobenzene	BRL		ug/L	5
99-09-2	3-Nitroaniline	BRL		ug/L	5
51-28-5	2,4-Dinitrophenol	BRL		ug/L	5
100-02-7	4-Nitrophenol	BRL		ug/L	5
132-64-9	Dibenzofuran	BRL		ug/L	5
121-14-2	2,4-Dinitrotoluene	BRL		ug/L	5
84-66-2	Diethyl phthalate	BRL		ug/L	5
7005-72-3	4-Chlorophenyl phenyl ether	BRL		ug/L	5
100-01-6	4-Nitroaniline	BRL		ug/L	5
534-52-1	4,6-Dinitro-2-methylphenol	BRL		ug/L	5

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category:	**EPA Method 8270C (Part 1)**	Instrument ID:	**MS-3 HP 5890**
QC Batch ID:	**SV-2507-F**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-17-10 10:08**
		Analyst:	**MJB**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
86-30-6	N-Nitrosodiphenylamine †	BRL		ug/L	5
122-66-7	1,2-Diphenylhydrazine ◊	BRL		ug/L	5
101-55-3	4-Bromophenyl phenyl ether	BRL		ug/L	5
86-74-8	Carbazole	BRL		ug/L	5
84-74-2	Di-*n*-butyl phthalate	BRL		ug/L	5
85-68-7	Butyl benzyl phthalate	BRL		ug/L	5
91-94-1	3,3'-Dichlorobenzidine	BRL		ug/L	5
117-81-7	Bis(2-ethylhexyl) phthalate	BRL		ug/L	5
117-84-0	Di-*n*-octyl phthalate	BRL		ug/L	5

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	11	**54** %	15 - 110 %
Phenol-d5	20	9	**45** %	15 - 110 %
Nitrobenzene-d5	10	6	**60** %	30 - 130 %
2-Fluorobiphenyl	10	8	**79** %	30 - 130 %
2,4,6-Tribromophenol	20	15	**76** %	15 - 110 %
Terphenyl-d14	10	8	**79** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Sample extraction performed by EPA Method 3510C.

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

* Analyzed as 4-Methylphenol.

† Reported as sum of N-Nitrosodiphenylamine and Diphenylamine.

◊ Analyzed as Azobenzene.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Samples

		LCS		LCSD	
Category:	**EPA 8270C (Part 2)**	Instrument ID:	**MS-6 HP 6890**	Instrument ID:	**MS-6 HP 6890**
QC Batch ID:	**SV-2507-F**	Extracted:	**05-13-10 16:00**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-17-10 08:44**	Analyzed:	**05-17-10 09:24**
Units:	**ug/L**	Analyst:	**MJB**	Analyst:	**MJB**

CAS Number	Analyte	LCS			LCS Duplicate				QC Limits	
		Spiked	Measured	Recovery	Spiked	Measured	Recovery	RPD	Spike	RPD
91-20-3	Naphthalene	5.0	3.3	**65** %	5.0	3.3	**66** %	**2** %	40 - 140 %	25%
91-57-6	2-Methylnaphthalene	5.0	3.5	**70** %	5.0	3.6	**72** %	**2** %	40 - 140 %	25%
208-96-8	Acenaphthylene	5.0	3.8	**77** %	5.0	3.9	**79** %	**2** %	40 - 140 %	25%
83-32-9	Acenaphthene	5.0	3.3	**66** %	5.0	3.3	**65** %	**2** %	40 - 140 %	25%
86-73-7	Fluorene	5.0	3.9	**78** %	5.0	3.9	**78** %	**1** %	40 - 140 %	25%
85-01-8	Phenanthrene	5.0	4.2	**84** %	5.0	4.0	**81** %	**4** %	40 - 140 %	25%
120-12-7	Anthracene	5.0	4.3	**86** %	5.0	4.1	**82** %	**5** %	40 - 140 %	25%
206-44-0	Fluoranthene	5.0	4.0	**79** %	5.0	3.8	**75** %	**5** %	40 - 140 %	25%
129-00-0	Pyrene	5.0	4.2	**83** %	5.0	4.0	**81** %	**3** %	40 - 140 %	25%
56-55-3	Benzo[a]anthracene	5.0	3.8	**76** %	5.0	3.7	**74** %	**3** %	40 - 140 %	25%
218-01-9	Chrysene	5.0	3.6	**72** %	5.0	3.5	**70** %	**2** %	40 - 140 %	25%
205-99-2	Benzo[b]fluoranthene	5.0	4.0	**81** %	5.0	3.9	**78** %	**3** %	40 - 140 %	25%
207-08-9	Benzo[k]fluoranthene	5.0	3.8	**76** %	5.0	3.8	**76** %	**1** %	40 - 140 %	25%
50-32-8	Benzo[a]pyrene	5.0	3.9	**79** %	5.0	4.0	**80** %	**1** %	40 - 140 %	25%
193-39-5	Indeno[1,2,3-c,d]pyrene	5.0	4.0	**79** %	5.0	3.9	**78** %	**1** %	40 - 140 %	25%
53-70-3	Dibenzo[a,h]anthracene	5.0	4.0	**80** %	5.0	4.0	**80** %	**0** %	40 - 140 %	25%
191-24-2	Benzo[g,h,i]perylene	5.0	3.8	**76** %	5.0	3.7	**74** %	**2** %	40 - 140 %	25%
87-68-3	Hexachlorobutadiene	5.0	3.6	**73** %	5.0	3.4	**69** %	**6** %	40 - 140 %	25%
118-74-1	Hexachlorobenzene	5.0	3.8	**76** %	5.0	3.7	**74** %	**3** %	40 - 140 %	25%
87-86-5	Pentachlorophenol	5.0	2.7	**55** %	5.0	2.9	**57** %	**5** %	30 - 130 %	25%

QC Surrogate Compound	Spiked	Measured	Recovery	Spiked	Measured	Recovery		QC Limits
2-Fluorophenol	20	11	**53** %	20	10	**51** %		15 - 110 %
Phenol-d5	20	9.2	**46** %	20	9.0	**45** %		15 - 110 %
Nitrobenzene-d5	10	6.5	**65** %	10	6.4	**65** %		30 - 130 %
2-Fluorobiphenyl	10	6.9	**69** %	10	7.1	**71** %		30 - 130 %
2,4,6-Tribromophenol	20	18	**92** %	20	17	**87** %		15 - 110 %
Terphenyl-d14	10	6.9	**69** %	10	6.5	**65** %		30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996). Sample extraction performed by EPA Method 3510C.

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category:	**EPA Method 8270C (Part 2)**	Instrument ID:	**MS-6 HP 6890**
QC Batch ID:	**SV-2507-F**	Extracted:	**05-13-10 16:00**
Matrix:	**Aqueous**	Analyzed:	**05-17-10 10:04**
		Analyst:	**MJB**

CAS Number	Analyte	Concentration	Notes	Units	Reporting Limit
91-20-3	Naphthalene	BRL		ug/L	0.5
91-57-6	2-Methylnaphthalene	BRL		ug/L	0.5
208-96-8	Acenaphthylene	BRL		ug/L	0.5
83-32-9	Acenaphthene	BRL		ug/L	0.5
86-73-7	Fluorene	BRL		ug/L	0.5
85-01-8	Phenanthrene	BRL		ug/L	0.5
120-12-7	Anthracene	BRL		ug/L	0.5
206-44-0	Fluoranthene	BRL		ug/L	0.5
129-00-0	Pyrene	BRL		ug/L	0.5
56-55-3	Benzo[a]anthracene	BRL		ug/L	0.1
218-01-9	Chrysene	BRL		ug/L	0.1
205-99-2	Benzo[b]fluoranthene	BRL		ug/L	0.1
207-08-9	Benzo[k]fluoranthene	BRL		ug/L	0.1
50-32-8	Benzo[a]pyrene	BRL		ug/L	0.1
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL		ug/L	0.1
53-70-3	Dibenzo[a,h]anthracene	BRL		ug/L	0.1
191-24-2	Benzo[g,h,i]perylene	BRL		ug/L	0.1
87-68-3	Hexachlorobutadiene	BRL		ug/L	0.5
118-74-1	Hexachlorobenzene	BRL		ug/L	0.5
87-86-5	Pentachlorophenol	BRL		ug/L	1.0

QC Surrogate Compound	Spiked	Measured	Recovery	QC Limits
2-Fluorophenol	20	9.7	**48** %	15 - 110 %
Phenol-d5	20	8.7	**44** %	15 - 110 %
Nitrobenzene-d5	10	7.0	**70** %	30 - 130 %
2-Fluorobiphenyl	10	6.8	**68** %	30 - 130 %
2,4,6-Tribromophenol	20	15	**76** %	15 - 110 %
Terphenyl-d14	10	6.2	**62** %	30 - 130 %

Method Reference: Test Methods for Evaluating Solid Waste, US EPA, SW-846, Third Edition, Update III (1996).
Method modified by use of selected ion monitoring (SIM) in accordance with Section 7.5.5 of the method.
Sample extraction performed by EPA Method 3510C.

Report Notations: BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample size and dilution.

GROUNDWATER ANALYTICAL

Certifications and Approvals

Groundwater Analytical maintains environmental laboratory certification in a variety of states.
Copies of our current certificates may be obtained from our website:

http://www.groundwateranalytical.com/qualifications.htm

CONNECTICUT

Department of Health Services, PH-0586 — Potable Water, Wastewater, Solid Waste and Soil
http://www.ct.gov/dph/lib/dph/environmental health/environmental laboratories/pdf/Out State.pdf

MASSACHUSETTS

Department of Environmental Protection, M-MA-103 — Potable Water and Non-Potable Water
http://public.dep.state.ma.us/labcert/labcert.aspx

Department of Labor,
Division of Occupational Safety, AA000195 — Asbestos Analytical Services, Class A
http://www.mass.gov/dos/forms/la-rpt list aa.pdf

NEW HAMPSHIRE

Department of Environmental Services, 202708 — Potable Water, Non-Potable Water, Solid and Chemical Materials
http://www4.egov.nh.gov/DES/NHELAP

NEW YORK

Department of Health, 11754 — Potable Water, Non-Potable Water, Solid and Hazardous Waste
http://www.wadsworth.org/labcert/elap/comm.html

RHODE ISLAND

Department of Health,
Division of Laboratories, LAO00054 — Potable and Non-Potable Water Microbiology, Organic and Inorganic Chemistry
http://www.health.ri.gov/labs/outofstatelabs.pdf

U.S. DEPARTMENT OF AGRICULTURE

USDA, Soil Permit, S-53921 — Foreign soil import permit

VERMONT

Department of Health, VT-87643 — Potable Water
http://healthvermont.gov/enviro/ph_lab/water_test.aspx#cert

GROUNDWATER ANALYTICAL

Certifications and Approvals

MASSACHUSETTS **Department of Environmental Protection, M-MA-103**

Groundwater Analytical maintains MassDEP environmental laboratory certification for only the methods and analytes listed below. Analyses for certified analytes are conducted in accordance with MassDEP certification standards, except as may be specifically noted in the project narrative.

Potable Water (Drinking Water)

Analyte	Method
1,2-Dibromo-3-Chloropropane	EPA 504.1
1,2-Dibromoethane	EPA 504.1
Alkalinity, Total	SM 2320-B
Antimony	EPA 200.8
Arsenic	EPA 200.8
Barium	EPA 200.7
Barium	EPA 200.8
Beryllium	EPA 200.7
Beryllium	EPA 200.8
Cadmium	EPA 200.7
Cadmium	EPA 200.8
Calcium	EPA 200.7
Chlorine, Residual Free	SM 4500-CL-G
Chromium	EPA 200.7
Copper	EPA 200.7
Copper	EPA 200.8
Cyanide, Total	Lachat 10-204-00-1-A
E. Coli (Treatment and Distribution)	Enz. Sub. SM 9223
E. Coli (Treatment and Distribution)	NA-MUG SM 9222-G
Fecal Coliform (Source Water)	MF SM 9222-D
Fluoride	EPA 300.0
Fluoride	SM 4500-F-C
Heterotrophic Plate Count	SM 9215-B
Lead	EPA 200.8
Mercury	EPA 245.1
Nickel	EPA 200.7
Nickel	EPA 200.8
Nitrate-N	EPA 300.0
Nitrate-N	Lachat 10-107-04-1-C
Nitrite-N	EPA 300.0
Nitrite-N	Lachat 10-107-04-1-C
pH	SM 4500-H-B
Selenium	EPA 200.8
Silver	EPA 200.7
Silver	EPA 200.8
Sodium	EPA 200.7
Sulfate	EPA 300.0
Thallium	EPA 200.8
Total Coliform (Treatment and Distribution)	Enz. Sub. SM 9223
Total Coliform (Treatment and Distribution)	MF SM 9222-B
Total Dissolved Solids	SM 2540-C
Trihalomethanes	EPA 524.2
Turbidity	SM 2130-B
Volatile Organic Compounds	EPA 524.2

Non-Potable Water (Wastewater)

Analyte	Method
Aldrin	EPA 608
Alkalinity, Total	SM 2320-B
Alpha-BHC	EPA 608
Aluminum	EPA 200.7
Ammonia-N	Lachat 10-107-06-1-B

Non-Potable Water (Wastewater)

Analyte	Method
Antimony	EPA 200.7
Antimony	EPA 200.8
Arsenic	EPA 200.7
Arsenic	EPA 200.8
Beryllium	EPA 200.7
Beryllium	EPA 200.8
Beta-BHC	EPA 608
Biochemical Oxygen Demand	SM 5210-B
Cadmium	EPA 200.7
Cadmium	EPA 200.8
Calcium	EPA 200.7
Chemical Oxygen Demand	SM 5220-D
Chlordane	EPA 608
Chloride	EPA 300.0
Chlorine, Total Residual	SM 4500-CL-G
Chromium	EPA 200.7
Chromium	EPA 200.8
Cobalt	EPA 200.7
Cobalt	EPA 200.8
Copper	EPA 200.7
Copper	EPA 200.8
Cyanide, Total	Lachat 10-204-00-1-A
DDD	EPA 608
DDE	EPA 608
DDT	EPA 608
Delta-BHC	EPA 608
Dieldrin	EPA 608
Endosulfan I	EPA 608
Endosulfan II	EPA 608
Endosulfan Sulfate	EPA 608
Endrin	EPA 608
Endrin Aldehyde	EPA 608
Fluoride	EPA 300.0
Gamma-BHC	EPA 608
Hardness (CaCO3), Total	EPA 200.7
Hardness (CaCO3), Total	SM 2340-B
Heptachlor	EPA 608
Heptachlor Epoxide	EPA 608
Iron	EPA 200.7
Kjeldahl-N	Lachat 10-107-06-02-D
Lead	EPA 200.7
Magnesium	EPA 200.7
Manganese	EPA 200.7
Manganese	EPA 200.8
Mercury	EPA 245.1
Molybdenum	EPA 200.7
Molybdenum	EPA 200.8
Nickel	EPA 200.7
Nickel	EPA 200.8
Nitrate-N	EPA 300.0
Nitrate-N	Lachat 10-107-04-1-C
Non-Filterable Residue	SM 2540-D
Oil and Grease	EPA 1664

GROUNDWATER ANALYTICAL

Certifications and Approvals

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Non-Potable Water (Wastewater)

Analyte	Method
Orthophosphate	Lachat 10-115-01-1-A
pH	SM 4500-H-B
Phenolics, Total	EPA 420.4
Phenolics, Total	Lachat 10-210-00-1-B
Phosphorus, Total	Lachat 10-115-01-1-C
Phosphorus, Total	SM 4500-P-B,E
Polychlorinated Biphenyls (Oil)	EPA 600/4-81-045
Polychlorinated Biphenyls (Water)	EPA 608
Potassium	EPA 200.7
Selenium	EPA 200.7
Selenium	EPA 200.8
Silver	EPA 200.7
Sodium	EPA 200.7
Specific Conductivity	SM 2510-B
Strontium	EPA 200.7
Sulfate	EPA 300.0
SVOC-Acid Extractables	EPA 625
SVOC-Base/Neutral Extractables	EPA 625
Thallium	EPA 200.7
Thallium	EPA 200.8
Titanium	EPA 200.7
Total Dissolved Solids	SM 2540-C
Total Organic Carbon	SM 5310-B
Toxaphene	EPA 608
Vanadium	EPA 200.7
Vanadium	EPA 200.8
Volatile Aromatics	EPA 602
Volatile Aromatics	EPA 624
Volatile Halocarbons	EPA 624
Zinc	EPA 200.7
Zinc	EPA 200.8

ANALYTICAL REPORT

Lab Number:	L1008028
Client:	Haley & Aldrich, Inc. 465 Medford Street, Suite 2200 Charlestown, MA 02129-1400
ATTN:	Mark Balfe
Phone:	(617) 886-7304
Project Name:	MMHC
Project Number:	35198-020
Report Date:	06/02/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1008028-01	POWERHOUSE S1	Not Specified	05/28/10 11:30

Project Name:	MMHC	**Lab Number:**	L1008028
Project Number:	35198-020	**Report Date:**	06/02/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Sample Receipt

A container for the TPH-1664 analysis was received but not listed on the Chain of Custody. The analysis was performed at the client's request.

Volatile Organics

L1008028-01: The pH of the sample was less than two. It should be noted that 2-Chloroethylvinyl ether breaks down under acidic conditions.

The WG415361-3 MS recovery, performed on L1008028-01, was above the acceptance criteria for trans-1,2-Dichloroethene (162%); however, the associated LCS recovery was within criteria. The results of the sample utilized for the MS are considered to have a potentially high bias for this compound.

Project Name:	MMHC	**Lab Number:**	L1008028
Project Number:	35198-020	**Report Date:**	06/02/10

Case Narrative (continued)

Semivolatile Organics

The WG415302-2 LCS recovery associated with L1008028-01 was above the acceptance criteria for 2,4-Dinitrophenol (143%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported.

The WG415302-2/-3 LCS/LCSD RPDs, associated with L1008028-01, are above the acceptance criteria for 1,2-Dichlorobenzene (32%) and 2,4-Dinitrophenol (48%).

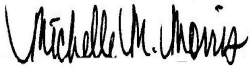
Metals

L1008028-01 has elevated detection limits for all analytes except Iron and Mercury, due to the dilution required by the high concentrations of non-target analytes. The requested reporting limits were not achieved.

Solids, Total Suspended

WG415366: A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Michelle M. Morris

Title: Technical Director/Representative Date: 06/02/10

ORGANICS

VOLATILES

Project Name: MMHC
Project Number: 35198-020
Lab Number: L1008028
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID:	L1008028-01	Date Collected:	05/28/10 11:30
Client ID:	POWERHOUSE S1	Date Received:	05/28/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	06/02/10 11:00
Analytical Date:	06/02/10 12:42		
Analyst:	SS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008028-01	Date Collected:	05/28/10 11:30
Client ID:	POWERHOUSE S1	Date Received:	05/28/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	5,624		
Analytical Date:	06/01/10 08:36		
Analyst:	TT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.5	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	10	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	2.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008028-01 Date Collected: 05/28/10 11:30

Client ID: POWERHOUSE S1 Date Received: 05/28/10

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylene (Total)	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	10	--	1
Vinyl acetate	ND		ug/l	20	--	1
4-Methyl-2-pentanone	ND		ug/l	10	--	1
2-Hexanone	ND		ug/l	10	--	1
Acrolein	ND		ug/l	8.0	--	1
Acrylonitrile	ND		ug/l	10	--	1
Methyl tert butyl ether	ND		ug/l	20	--	1
Dibromomethane	ND		ug/l	1.0	--	1
1,4-Dioxane	ND		ug/l	2000	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		80-120
Fluorobenzene	101		80-120
4-Bromofluorobenzene	101		80-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 06/01/10 07:25
Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415361-2					
Methylene chloride	ND		ug/l	5.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.5	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	10	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	2.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,624
Analytical Date: 06/01/10 07:25
Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415361-2					
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylene (Total)	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	10	--
Vinyl acetate	ND		ug/l	20	--
4-Methyl-2-pentanone	ND		ug/l	10	--
2-Hexanone	ND		ug/l	10	--
Acrolein	ND		ug/l	8.0	--
Acrylonitrile	ND		ug/l	10	--
Methyl tert butyl ether	ND		ug/l	20	--
Dibromomethane	ND		ug/l	1.0	--
1,4-Dioxane	ND		ug/l	2000	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		80-120
Fluorobenzene	102		80-120
4-Bromofluorobenzene	103		80-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 06/02/10 12:05
Analyst: SS

Extraction Date: 06/02/10 11:00

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG415696-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415361-1								
Methylene chloride	108		-		1-221	-		30
1,1-Dichloroethane	110		-		59-155	-		30
Chloroform	113		-		51-138	-		30
Carbon tetrachloride	119		-		70-140	-		30
1,2-Dichloropropane	110		-		1-210	-		30
Dibromochloromethane	114		-		53-149	-		30
1,1,2-Trichloroethane	107		-		52-150	-		30
2-Chloroethylvinyl ether	110		-		1-305	-		30
Tetrachloroethene	114		-		64-148	-		30
Chlorobenzene	120		-		37-160	-		30
Trichlorofluoromethane	106		-		17-181	-		30
1,2-Dichloroethane	107		-		49-155	-		30
1,1,1-Trichloroethane	114		-		52-162	-		30
Bromodichloromethane	118		-		35-155	-		30
trans-1,3-Dichloropropene	113		-		17-183	-		30
cis-1,3-Dichloropropene	111		-		1-227	-		30
Bromoform	115		-		45-169	-		30
1,1,2,2-Tetrachloroethane	114		-		46-157	-		30
Benzene	108		-		37-151	-		30
Toluene	109		-		47-150	-		30
Ethylbenzene	119		-		37-162	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415361-1								
Chloromethane	135		-		1-273	-		30
Bromomethane	138		-		1-242	-		30
Vinyl chloride	96		-		1-251	-		30
Chloroethane	101		-		14-230	-		30
1,1-Dichloroethene	115		-		1-234	-		30
trans-1,2-Dichloroethene	115		-		54-156	-		30
cis-1,2-Dichloroethene	105		-		60-140	-		30
Trichloroethene	112		-		71-157	-		30
1,2-Dichlorobenzene	118		-		18-190	-		30
1,3-Dichlorobenzene	118		-		59-156	-		30
1,4-Dichlorobenzene	117		-		18-190	-		30
p/m-Xylene	114		-		40-160	-		30
o-Xylene	111		-		40-160	-		30
XYLENE (TOTAL)	113		-		40-160	-		30
Styrene	103		-		40-160	-		30
Acetone	111		-		40-160	-		30
Carbon disulfide	117		-		40-160	-		30
2-Butanone	90		-		40-160	-		30
Vinyl acetate	101		-		40-160	-		30
4-Methyl-2-pentanone	87		-		40-160	-		30
2-Hexanone	83		-		40-160	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415361-1								
Acrolein	95		-		40-160	-		30
Acrylonitrile	115		-		40-160	-		30
Dibromomethane	101		-		70-130	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	105				80-120
Fluorobenzene	100				80-120
4-Bromofluorobenzene	105				80-120

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG415696-2								
1,2-Dibromoethane	102		-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
Methylene chloride	ND	20	22	111		-	-		1-221	-		30
1,1-Dichloroethane	ND	20	24	119		-	-		59-155	-		30
Chloroform	ND	20	24	120		-	-		51-138	-		30
Carbon tetrachloride	ND	20	27	133		-	-		70-140	-		30
1,2-Dichloropropane	ND	20	24	119		-	-		1-210	-		30
Dibromochloromethane	ND	20	24	120		-	-		53-149	-		30
1,1,2-Trichloroethane	ND	20	23	115		-	-		52-150	-		30
2-Chloroethylvinyl ether	ND	20	ND	4		-	-		1-305	-		30
Tetrachloroethene	ND	20	24	120		-	-		64-148	-		30
Chlorobenzene	ND	20	24	120		-	-		37-160	-		30
Trichlorofluoromethane	ND	20	22	112		-	-		17-181	-		30
1,2-Dichloroethane	ND	20	23	113		-	-		49-155	-		30
1,1,1-Trichloroethane	ND	20	25	125		-	-		52-162	-		30
Bromodichloromethane	ND	20	24	122		-	-		35-155	-		30
trans-1,3-Dichloropropene	ND	20	24	122		-	-		17-183	-		30
cis-1,3-Dichloropropene	ND	20	23	117		-	-		1-227	-		30
Bromoform	ND	20	24	121		-	-		45-169	-		30
1,1,2,2-Tetrachloroethane	ND	20	24	122		-	-		46-157	-		30
Benzene	ND	20	23	116		-	-		35-151	-		30
Toluene	ND	20	23	115		-	-		47-150	-		30
Ethylbenzene	ND	20	24	122		-	-		37-162	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
Chloromethane	ND	20	31	154		-	-		1-273	-		30
Bromomethane	ND	20	29	143		-	-		1-242	-		30
Vinyl chloride	ND	20	22	111		-	-		1-251	-		30
Chloroethane	ND	20	22	109		-	-		14-230	-		30
1,1-Dichloroethene	ND	20	24	121		-	-		1-234	-		30
trans-1,2-Dichloroethene	ND	20	32	**162**	Q	-	-		54-156	-		30
cis-1,2-Dichloroethene	ND	20	22	111		-	-		60-140	-		30
Trichloroethene	ND	20	23	117		-	-		71-157	-		30
1,2-Dichlorobenzene	ND	20	23	117		-	-		18-190	-		30
1,3-Dichlorobenzene	ND	20	24	119		-	-		59-156	-		30
1,4-Dichlorobenzene	ND	20	23	115		-	-		18-190	-		30
p/m-Xylene	ND	40	47	117		-	-		40-160	-		30
o-Xylene	ND	20	23	114		-	-		40-160	-		30
XYLENE (TOTAL)	ND	60	70	116		-	-		40-160	-		30
Styrene	ND	20	21	104		-	-		40-160	-		30
Acetone	ND	50	46	92		-	-		40-160	-		30
Carbon disulfide	ND	20	24	119		-	-		40-160	-		30
2-Butanone	ND	50	53	106		-	-		40-160	-		30
Vinyl acetate	ND	40	49	122		-	-		40-160	-		30
4-Methyl-2-pentanone	ND	50	45	90		-	-		40-160	-		30
2-Hexanone	ND	50	44	88		-	-		40-160	-		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
Acrolein	ND	40	38	96		-	-		40-160	-		30
Acrylonitrile	ND	40	47	117		-	-		40-160	-		30
Dibromomethane	ND	20	22	109		-	-			-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
4-Bromofluorobenzene	102				80-120
Fluorobenzene	100				80-120
Pentafluorobenzene	102				80-120

Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415696-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
1,2-Dibromoethane	ND	0.251	0.252	100		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
Methylene chloride	ND	ND	ug/l	NC		30
1,1-Dichloroethane	ND	ND	ug/l	NC		30
Chloroform	ND	ND	ug/l	NC		30
Carbon tetrachloride	ND	ND	ug/l	NC		30
1,2-Dichloropropane	ND	ND	ug/l	NC		30
Dibromochloromethane	ND	ND	ug/l	NC		30
1,1,2-Trichloroethane	ND	ND	ug/l	NC		30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC		30
Tetrachloroethene	ND	ND	ug/l	NC		30
Chlorobenzene	ND	ND	ug/l	NC		30
Trichlorofluoromethane	ND	ND	ug/l	NC		30
1,2-Dichloroethane	ND	ND	ug/l	NC		30
1,1,1-Trichloroethane	ND	ND	ug/l	NC		30
Bromodichloromethane	ND	ND	ug/l	NC		30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		30
Bromoform	ND	ND	ug/l	NC		30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		30
Benzene	ND	ND	ug/l	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1					
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene	ND	ND	ug/l	NC	30
o-xylene	ND	ND	ug/l	NC	30
Xylene (Total)	ND	ND	ug/l	NC	30
Styrene	ND	ND	ug/l	NC	30
Acetone	ND	ND	ug/l	NC	30
Carbon disulfide	ND	ND	ug/l	NC	30

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415361-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1					
2-Butanone	ND	ND	ug/l	NC	30
Vinyl acetate	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone	ND	ND	ug/l	NC	30
2-Hexanone	ND	ND	ug/l	NC	30
Acrolein	ND	ND	ug/l	NC	30
Acrylonitrile	ND	ND	ug/l	NC	30
Methyl tert butyl ether	ND	ND	ug/l	NC	30
Dibromomethane	ND	ND	ug/l	NC	30
1,4-Dioxane	ND	ND	ug/l	NC	30
Tert-Butyl Alcohol	ND	ND	ug/l	NC	30
Tertiary-Amyl Methyl Ether	ND	ND	ug/l	NC	30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	102		100		80-120
Fluorobenzene	101		101		80-120
4-Bromofluorobenzene	101		101		80-120

SEMIVOLATILES

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008028-01	Date Collected:	05/28/10 11:30
Client ID:	POWERHOUSE S1	Date Received:	05/28/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C	Extraction Date:	05/29/10 16:56
Analytical Date:	06/02/10 14:35		
Analyst:	PS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	49	--	1
1,2,4-Trichlorobenzene	ND		ug/l	4.9	--	1
Bis(2-chloroethyl)ether	ND		ug/l	4.9	--	1
1,2-Dichlorobenzene	ND		ug/l	4.9	--	1
1,3-Dichlorobenzene	ND		ug/l	4.9	--	1
1,4-Dichlorobenzene	ND		ug/l	4.9	--	1
3,3'-Dichlorobenzidine	ND		ug/l	49	--	1
2,4-Dinitrotoluene	ND		ug/l	5.9	--	1
2,6-Dinitrotoluene	ND		ug/l	4.9	--	1
Azobenzene	ND		ug/l	4.9	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	4.9	--	1
4-Bromophenyl phenyl ether	ND		ug/l	4.9	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	4.9	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.9	--	1
Hexachlorocyclopentadiene	ND		ug/l	29	--	1
Isophorone	ND		ug/l	4.9	--	1
Nitrobenzene	ND		ug/l	4.9	--	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	4.9	--	1
Butyl benzyl phthalate	ND		ug/l	4.9	--	1
Di-n-butylphthalate	ND		ug/l	4.9	--	1
Di-n-octylphthalate	ND		ug/l	4.9	--	1
Diethyl phthalate	ND		ug/l	4.9	--	1
Dimethyl phthalate	ND		ug/l	4.9	--	1
Aniline	ND		ug/l	20	--	1
4-Chloroaniline	ND		ug/l	4.9	--	1
2-Nitroaniline	ND		ug/l	4.9	--	1
3-Nitroaniline	ND		ug/l	4.9	--	1
4-Nitroaniline	ND		ug/l	6.8	--	1
Dibenzofuran	ND		ug/l	4.9	--	1

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008028-01 Date Collected: 05/28/10 11:30

Client ID: POWERHOUSE S1 Date Received: 05/28/10

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
n-Nitrosodimethylamine	ND		ug/l	49	--	1
2,4,6-Trichlorophenol	ND		ug/l	4.9	--	1
P-Chloro-M-Cresol	ND		ug/l	4.9	--	1
2-Chlorophenol	ND		ug/l	5.9	--	1
2,4-Dichlorophenol	ND		ug/l	9.8	--	1
2,4-Dimethylphenol	ND		ug/l	9.8	--	1
2-Nitrophenol	ND		ug/l	20	--	1
4-Nitrophenol	ND		ug/l	9.8	--	1
2,4-Dinitrophenol	ND		ug/l	29	--	1
4,6-Dinitro-o-cresol	ND		ug/l	20	--	1
Phenol	ND		ug/l	6.8	--	1
2-Methylphenol	ND		ug/l	5.9	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.9	--	1
2,4,5-Trichlorophenol	ND		ug/l	4.9	--	1
Benzoic Acid	ND		ug/l	49	--	1
Benzyl Alcohol	ND		ug/l	9.8	--	1
Carbazole	ND		ug/l	4.9	--	1
Pyridine	ND		ug/l	49	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	45		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	62		33-120

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008028-01	Date Collected:	05/28/10 11:30
Client ID:	POWERHOUSE S1	Date Received:	05/28/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270C-SIM	Extraction Date:	05/29/10 17:02
Analytical Date:	06/02/10 12:46		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.49	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	ND		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.78	--	1
Hexachlorobenzene	ND		ug/l	0.78	--	1
Hexachloroethane	ND		ug/l	0.78	--	1

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008028-01 Date Collected: 05/28/10 11:30

Client ID: POWERHOUSE S1 Date Received: 05/28/10

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	97		33-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 06/01/10 11:25
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 05/29/10 16:56

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415302-1					
Benzidine	ND		ug/l	50	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	5.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
3,3'-Dichlorobenzidine	ND		ug/l	50	--
2,4-Dinitrotoluene	ND		ug/l	6.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	5.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	5.0	--
4-Bromophenyl phenyl ether	ND		ug/l	5.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	30	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	5.0	--
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	20	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	7.0	--
Dibenzofuran	ND		ug/l	5.0	--
n-Nitrosodimethylamine	ND		ug/l	50	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C
Analytical Date: 06/01/10 11:25
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 05/29/10 16:56

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG415302-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
P-Chloro-M-Cresol	ND		ug/l	5.0	--
2-Chlorophenol	ND		ug/l	6.0	--
2,4-Dichlorophenol	ND		ug/l	10	--
2,4-Dimethylphenol	ND		ug/l	10	--
2-Nitrophenol	ND		ug/l	20	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	30	--
4,6-Dinitro-o-cresol	ND		ug/l	20	--
Phenol	ND		ug/l	7.0	--
2-Methylphenol	ND		ug/l	6.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	10	--
Carbazole	ND		ug/l	5.0	--
Pyridine	ND		ug/l	50	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	81		33-120

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C-SIM
Analytical Date: 06/01/10 12:50
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 05/29/10 17:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG415303-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270C-SIM
Analytical Date: 06/01/10 12:50
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 05/29/10 17:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG415303-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	95		33-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415302-2 WG415302-3								
1,2,4-Trichlorobenzene	56		75		39-98	29		30
1,2-Dichlorobenzene	55		76		40-140	**32**	Q	30
1,4-Dichlorobenzene	57		73		36-97	25		30
2,4-Dinitrotoluene	93		88		24-96	6		30
2,6-Dinitrotoluene	82		74		40-140	10		30
4-Chlorophenyl phenyl ether	68		82		40-140	19		30
n-Nitrosodi-n-propylamine	63		77		41-116	20		30
Butyl benzyl phthalate	86		102		40-140	17		30
P-Chloro-M-Cresol	76		87		23-97	13		30
2-Chlorophenol	66		86		27-123	26		30
2-Nitrophenol	79		76		30-130	4		30
4-Nitrophenol	53		58		10-80	9		30
2,4-Dinitrophenol	**143**	Q	88		20-130	**48**	Q	30
Phenol	40		53		12-110	28		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG415302-2 WG415302-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		55		21-120
Phenol-d6	34		44		10-120
Nitrobenzene-d5	70		73		23-120
2-Fluorobiphenyl	63		76		15-120
2,4,6-Tribromophenol	83		94		10-120
4-Terphenyl-d14	79		95		33-120

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG415303-2 WG415303-3								
Acenaphthene	78		77		37-111	1		40
2-Chloronaphthalene	92		84		40-140	9		40
Fluoranthene	95		93		40-140	2		40
Anthracene	83		82		40-140	1		40
Pyrene	88		86		26-127	2		40
Pentachlorophenol	81		77		9-103	5		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG415303-2 WG415303-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	59		58		21-120
Phenol-d6	44		39		10-120
Nitrobenzene-d5	86		78		23-120
2-Fluorobiphenyl	72		63		15-120
2,4,6-Tribromophenol	96		103		10-120
4-Terphenyl-d14	94		89		33-120

PCBS

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID:	L1008028-01	Date Collected:	05/28/10 11:30
Client ID:	POWERHOUSE S1	Date Received:	05/28/10
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	05/30/10 13:35
Analytical Date:	06/01/10 14:41	Cleanup Method1:	EPA 3665A
Analyst:	JB	Cleanup Date1:	06/01/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	06/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.255	--	1
Aroclor 1221	ND		ug/l	0.255	--	1
Aroclor 1232	ND		ug/l	0.255	--	1
Aroclor 1242	ND		ug/l	0.255	--	1
Aroclor 1248	ND		ug/l	0.255	--	1
Aroclor 1254	ND		ug/l	0.255	--	1
Aroclor 1260	ND		ug/l	0.255	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 06/01/10 13:10
Analyst: JB

Extraction Method: EPA 608
Extraction Date: 05/30/10 13:35
Cleanup Method1: EPA 3665A
Cleanup Date1: 06/01/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 06/01/10

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG415320-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	68		30-150	A

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415320-3 QC Sample: L1007969-01 Client ID: MS Sample												
Aroclor 1016	ND	2	1.67	84		-	-		40-126	-		30
Aroclor 1260	ND	2	1.42	71		-	-		40-127	-		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	*Column*
2,4,5,6-Tetrachloro-m-xylene	59				30-150	A
Decachlorobiphenyl	62				30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG415320-2								
Aroclor 1016	84		-		40-126	-		30
Aroclor 1260	66		-		40-127	-		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50				30-150	A
Decachlorobiphenyl	78				30-150	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415320-4 QC Sample: L1007969-01 Client ID: DUP Sample						
Aroclor 1016	ND	ND	ug/l	NC		30
Aroclor 1221	ND	ND	ug/l	NC		30
Aroclor 1232	ND	ND	ug/l	NC		30
Aroclor 1242	ND	ND	ug/l	NC		30
Aroclor 1248	ND	ND	ug/l	NC		30
Aroclor 1254	ND	ND	ug/l	NC		30
Aroclor 1260	ND	ND	ug/l	NC		30

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		57		30-150	A
Decachlorobiphenyl	59		56		30-150	A

METALS

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

SAMPLE RESULTS

Lab ID: L1008028-01 Date Collected: 05/28/10 11:30

Client ID: POWERHOUSE S1 Date Received: 05/28/10

Sample Location: Not Specified Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0045		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Arsenic, Total	0.003		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Cadmium, Total	0.0006		mg/l	0.0004	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Chromium, Total	ND		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Copper, Total	0.0109		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Iron, Total	2.0		mg/l	0.05	--	1	06/01/10 15:50	06/02/10 11:47	EPA 3005A	19,200.7	AI
Lead, Total	0.0020		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Mercury, Total	ND		mg/l	0.0002	--	1	06/01/10 17:40	06/02/10 11:06	EPA 245.1	3,245.1	EZ
Nickel, Total	0.0053		mg/l	0.0010	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Selenium, Total	ND		mg/l	0.002	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Silver, Total	ND		mg/l	0.0008	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM
Zinc, Total	0.1131		mg/l	0.0100	--	2	06/01/10 17:00	06/02/10 16:52	EPA 3005A	1,6020	BM

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415502-1										
Iron, Total	ND		mg/l	0.05	--	1	06/01/10 15:50	06/02/10 11:27	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415505-1										
Antimony, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Arsenic, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Cadmium, Total	ND		mg/l	0.0002	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Chromium, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Copper, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Lead, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Nickel, Total	ND		mg/l	0.0005	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Selenium, Total	ND		mg/l	0.001	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Silver, Total	ND		mg/l	0.0004	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM
Zinc, Total	ND		mg/l	0.0050	--	1	06/01/10 17:00	06/02/10 16:04	1,6020	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG415528-1										
Mercury, Total	ND		mg/l	0.0002	--	1	06/01/10 17:40	06/02/10 10:55	3,245.1	EZ

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC

Project Number: 35198-020

Lab Number: L1008028

Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415502-2								
Iron, Total	96		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415505-2								
Antimony, Total	89		-		80-120	-		
Arsenic, Total	87		-		80-120	-		
Cadmium, Total	99		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Copper, Total	98		-		80-120	-		
Lead, Total	100		-		80-120	-		
Nickel, Total	99		-		80-120	-		
Selenium, Total	90		-		80-120	-		
Silver, Total	96		-		80-120	-		
Zinc, Total	93		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG415528-2								
Mercury, Total	109		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415502-4 QC Sample: L1008026-01 Client ID: MS Sample												
Iron, Total	0.07	1	1.0	93		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415505-4 QC Sample: L1007904-02 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4300	86		-	-		80-120	-		20
Arsenic, Total	0.0010	0.12	0.1049	86		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0492	96		-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1813	91		-	-		80-120	-		20
Copper, Total	ND	0.25	0.2405	96		-	-		80-120	-		20
Lead, Total	ND	0.51	0.4989	98		-	-		80-120	-		20
Nickel, Total	ND	0.5	0.4774	95		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.104	87		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0439	88		-	-		80-120	-		20
Zinc, Total	ND	0.5	0.4557	91		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415528-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
Mercury, Total	ND	0.001	0.0012	116		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415502-3 QC Sample: L1008026-01 Client ID: DUP Sample						
Iron, Total	0.07	0.09	mg/l	16		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415505-3 QC Sample: L1007904-02 Client ID: DUP Sample						
Lead, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415528-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

SAMPLE RESULTS

Lab ID: L1008028-01
Client ID: POWERHOUSE S1
Sample Location: Not Specified
Matrix: Water

Date Collected: 05/28/10 11:30
Date Received: 05/28/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	6.0		mg/l	5.0	NA	1	-	06/01/10 08:30	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	05/30/10 13:10	06/02/10 11:43	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/28/10 22:00	30,4500CL-D	JO
TPH	ND		mg/l	4.00	--	1	06/02/10 09:45	06/02/10 16:15	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	--	1	-	06/02/10 14:36	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/28/10 22:40	05/28/10 22:40	30,3500CR-D	DD

Project Name: MMHC **Lab Number:** L1008028

Project Number: 35198-020 **Report Date:** 06/02/10

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415226-2										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	05/28/10 22:40	05/28/10 22:40	30,3500CR-D	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415251-2										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	05/28/10 22:00	30,4500CL-D	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415315-1										
Cyanide, Total	ND		mg/l	0.005	--	1	05/30/10 13:10	06/02/10 11:29	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415366-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	06/01/10 08:30	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415627-2										
TPH	ND		mg/l	4.00	--	1	06/02/10 09:45	06/02/10 16:15	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG415718-1										
Phenolics, Total	ND		mg/l	0.03	--	1	-	06/02/10 14:32	4,420.1	TH

Lab Control Sample Analysis

Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415226-1								
Chromium, Hexavalent	104		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415251-1								
Chlorine, Total Residual	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415315-2								
Cyanide, Total	104		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415627-1								
TPH	90		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG415718-2								
Phenolics, Total	102		-		82-111	-		12

Matrix Spike Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415226-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1												
Chromium, Hexavalent	ND	0.1	0.102	102		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415315-4 QC Sample: L1007941-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.214	107		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415627-3 QC Sample: L1008026-01 Client ID: MS Sample												
TPH	ND	20.6	17.1	83		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415718-3 QC Sample: L1008026-01 Client ID: MS Sample												
Phenolics, Total	ND	0.8	0.79	99		-	-		77-124	-		12

Lab Duplicate Analysis
Batch Quality Control

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415226-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415251-3 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415315-3 QC Sample: L1007941-01 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415627-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG415718-4 QC Sample: L1008028-01 Client ID: POWERHOUSE S1						
Phenolics, Total	ND	ND	mg/l	NC		12

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1008028-01A	Vial HCl preserved	A	N/A	3.2	Y	Absent	624(7)
L1008028-01B	Vial HCl preserved	A	N/A	3.2	Y	Absent	624(7)
L1008028-01C	Vial HCl preserved	A	N/A	3.2	Y	Absent	624(7)
L1008028-01D	Vial HCl preserved	A	N/A	3.2	Y	Absent	624(7)
L1008028-01E	Plastic 250ml NaOH preserved	A	>12	3.2	Y	Absent	TCN-4500(14)
L1008028-01F	Plastic 250ml HNO3 preserved	A	<2	3.2	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1008028-01G	Plastic 1000ml unpreserved	A	6	3.2	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1008028-01H	Plastic 1000ml unpreserved	A	6	3.2	Y	Absent	TSS-2540(7)
L1008028-01I	Amber 1000ml H2SO4 preserved	A	<2	3.2	Y	Absent	TPHENOL-420(28)
L1008028-01J	Amber 1000ml H2SO4 preserved	A	<2	3.2	Y	Absent	TPHENOL-420(28)
L1008028-01K	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	TPH-1664(28)
L1008028-01L	Amber 1000ml HCl preserved	A	<2	3.2	Y	Absent	TPH-1664(28)
L1008028-01M	Amber 1000ml Na2S2O3	A	6	3.2	Y	Absent	PCB-608(7)
L1008028-01N	Amber 1000ml Na2S2O3	A	6	3.2	Y	Absent	PCB-608(7)
L1008028-01O	Amber 1000ml unpreserved	A	6	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1008028-01P	Amber 1000ml unpreserved	A	6	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1008028-01Q	Amber 1000ml unpreserved	A	6	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1008028-01R	Amber 1000ml unpreserved	A	6	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1008028-01S	Vial water preserved	A	N/A	3.2	Y	Absent	504(14)
L1008028-01T	Vial water preserved	A	N/A	3.2	Y	Absent	504(14)
L1008028-01U	Vial water preserved	A	N/A	3.2	Y	Absent	504(14)
L1008028-01V	Vial water preserved	A	N/A	3.2	Y	Absent	504(14)

*Values in parentheses indicate holding time in days

Project Name: MMHC
Project Number: 35198-020

Lab Number: L1008028
Report Date: 06/02/10

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)

Container Comments

L1008028-01N

L1008028-01O

*Values in parentheses indicate holding time in days

Project Name:	MMHC	**Lab Number:**	L1008028
Project Number:	35198-020	**Report Date:**	06/02/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

Report Format: Data Usability Report

Project Name:	MMHC	**Lab Number:**	L1008028
Project Number:	35198-020	**Report Date:**	06/02/10

Data Qualifiers

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MMHC	**Lab Number:**	L1008028
Project Number:	35198-020	**Report Date:**	06/02/10

REFERENCES

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

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

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

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical 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 shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical 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.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised May 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)
Solid Waste/Soil (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B,4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)
(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

ALPHA Job # L1005028

CHAIN OF CUSTODY RECORD

HALEY & ALDRICH

Haley & Aldrich, Inc.
465 Medford St.,
Suite 2200,
Boston, MA 02129-1400

Phone (617) 886-7400
Fax (617) 886-7600
Page 1 of 1

H&A FILE NO.	35198-020	LABORATORY	Alpha Analytical
PROJECT NAME	MMHC	ADDRESS	Westborough, MA
H&A CONTACT	K. Alepedis	CONTACT	Gina Hall
DELIVERY DATE	5/28/10		
TURNAROUND TIME	2 days TAT		
PROJECT MANAGER	M. Balfe		

Sample No.	Date	Time	Depth	Type	Number of Containers
Powerhouse S1	5/28/10	1130		Aq	16
Powerhouse S1	5/28/10	1130		Aq	

Analysis Requested: ① VOA; ② Abn/PAH only; ③ MCP Metals; ④ Pesticides/PCBs; ⑤ VPH Full Suite Compounds only; ⑥ EPH Full Suite Compounds only; ⑦ TPH-Diesel/Kerosene; ⑧ TPH-Gasoline/Jet Fuel; ⑨ Reactivity, Ignitability, Corrosivity; ⑩ ⑪

Additional: 2 amber liters (NP) & 4 VOA vials (HCl) submitted as extra samples (Powerhouse S1) in the event of additional testing. Please call Ken A @ 617-886-7366

SDG for FOW.

22 pcs

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

① TSS 160.2
② TRC 330.1
③ Hex Cr SM 3500
④ TCN 335.2
⑤ VOC 624
⑥ EDB 504
⑦ SVOC 8270
⑧ PAH 8270-SIM
⑨ PCB 608
⑩ Total Metals Sb, As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn, Fe.
⑪ Total Phenol 420.1

LIQUID												
			↓	X	X						VOA Vial
			[redacted]			X	X	X		X	Amber Glass
X	X	X	X						X		Plastic Bottle
A	A	A	[redacted]C	H	H	A	A	H	D	E	Preservative
Lit	Lit	Lit	[redacted]			Lit	Lit	Lit	250	lit	Volume

250

SOLID	
	VOA Vial
	Amber Glass
	Clear Glass
	Preservative
	Volume

PRESERVATION KEY

A	Sample chilled	C	NaOH	E	H_2SO_4	G	Methanol
B	Sample filtered	D	HNO_3	F	HCL	H	Water/NaHSO4 (circle)

Sampling Comments

Sample Powerhouse S1 submitted for NPDES RGP permit application. Please follow appropriate testing methods and minimum detection levels as required

Call Ken A with questions @ 617-886-7366

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

Sampled and Relinquished by	Received
Sign [redacted]	Sign [redacted]
Print Desmond Crawford	Print Norm Lambert
Firm Haley + Aldrich	Firm MPBB
Date 5/28/10 Time 1550	Date 5.28.10 Time 1550
Relinquished by	**Received by**
Sign [redacted]	Sign [redacted]
Print	Print Alpha
Firm	Firm
Date 5/28/10 Time 1740	Date 5/28/10 Time 1740
Relinquished by	**Received by**
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty.

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyz

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE - Laboratory CANARY - Project Manager PINK - Haley & Aldrich Laboratory

AUGUST 2008

Form 3003

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