



## ANALYTICAL REPORT

Lab Number:	L0906386
Client:	Triumvirate Environmental, Inc. 61 Inner Belt Road Somerville, MA 02143
ATTN:	Mike Bricher
Project Name:	PERFORMANCE CONTRACTING
Project Number:	60590
Report Date:	05/26/09

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](http://www.alphalab.com)



**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0906386-01	GROUNDWATER	225 MAIN STREET, NORTHBRIDGE	05/19/09 16:00
L0906386-02	TRIP BLANK	225 MAIN STREET, NORTHBRIDGE	05/19/09 00:00

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

### 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.

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 replaces the report issued on May 22, 2009. The report has been amended to include the results for Tert-Butyl Alcohol, Tertiary-Amyl-Methyl-Ether, and 1,4-Dioxane by method 8260B.

#### Sample Receipt

The samples were received at the laboratory above the required temperature range. The samples were transported to the laboratory in a cooler with ice and delivered directly from the sampling site.

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

### Case Narrative (continued)

A Trip Blank was received in the laboratory but not listed on the Chain of Custody. At the client's request, the Trip Blank was not analyzed.

The sample was received without the container for total metals analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

#### Semivolatile Organics

The WG363533-2 LCS recovery associated with L0906386-01 was above the acceptance criteria for 2,4-Dinitrotoluene (98%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported.

#### Dissolved Metals

The WG363433-4 MS recovery for Iron (140%) is invalid because the sample concentration is greater than four times the spike amount added.

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:



Title: Technical Director/Representative

Date: 05/26/09

# ORGANICS

# VOLATILES

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 05/20/09 22:51  
**Analyst:** GK

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>					
Methylene chloride	ND		ug/l	3.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
Trichlorofluoromethane	ND		ug/l	2.5	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
1,1-Dichloropropene	ND		ug/l	2.5	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Toluene	ND		ug/l	0.75	1
Ethylbenzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Bromomethane	ND		ug/l	1.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

Lab ID: L0906386-01

Date Collected: 05/19/09 16:00

Client ID: GROUNDWATER

Date Received: 05/19/09

Sample Location: 225 MAIN STREET, NORTHBRIDGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>					
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
p/m-Xylene	ND		ug/l	1.0	1
o-Xylene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dibromomethane	ND		ug/l	5.0	1
1,4-Dichlorobutane	ND		ug/l	5.0	1
1,2,3-Trichloropropane	ND		ug/l	5.0	1
Styrene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
Acetone	ND		ug/l	5.0	1
Carbon disulfide	ND		ug/l	5.0	1
2-Butanone	ND		ug/l	5.0	1
Vinyl acetate	ND		ug/l	5.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1
2-Hexanone	ND		ug/l	5.0	1
Ethyl methacrylate	ND		ug/l	5.0	1
Acrylonitrile	ND		ug/l	5.0	1
Bromochloromethane	ND		ug/l	2.5	1
Tetrahydrofuran	ND		ug/l	10	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
Bromobenzene	ND		ug/l	2.5	1
n-Butylbenzene	ND		ug/l	0.50	1
sec-Butylbenzene	ND		ug/l	0.50	1
tert-Butylbenzene	ND		ug/l	2.5	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.50	1
Isopropylbenzene	ND		ug/l	0.50	1
p-Isopropyltoluene	ND		ug/l	0.50	1
Naphthalene	ND		ug/l	2.5	1
n-Propylbenzene	ND		ug/l	0.50	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	1

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

Lab ID: L0906386-01

Date Collected: 05/19/09 16:00

Client ID: GROUNDWATER

Date Received: 05/19/09

Sample Location: 225 MAIN STREET, NORTHBRIDGE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>					
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	1
Ethyl ether	ND		ug/l	2.5	1
Tert-Butyl Alcohol	ND		ug/l	30	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	1
1,4-Dioxane	ND		ug/l	250	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	104		70-130

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water  
**Analytical Method:** 14,504.1  
**Analytical Date:** 05/21/09 13:41  
**Analyst:** JB

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Pesticides by GC - Westborough Lab					
1,2-Dibromoethane	ND		ug/l	0.019	1

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 14,504.1  
Analytical Date: 05/21/09 13:03  
Analyst: JB

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RDL</b>
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG363415-1				
1,2-Dibromoethane	ND		ug/l	0.020

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 05/20/09 14:45  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Methylene chloride	ND		ug/l	3.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 05/20/09 14:45  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,4-Dichlorobutane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
Vinyl acetate	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Ethyl methacrylate	ND		ug/l	5.0
Acrylonitrile	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.50

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 05/20/09 14:45  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363439-3				
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Tert-Butyl Alcohol	ND		ug/l	30
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	104		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG363415-2					
1,2-Dibromoethane	73	-	70-130	-	20

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363439-1 WG363439-2					
Chlorobenzene	99	95	75-130	4	20
Benzene	100	98	76-127	2	20
Toluene	99	95	76-125	4	20
1,1-Dichloroethene	102	98	61-145	4	20
Trichloroethene	102	96	71-120	6	20

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
-----------	------------------	-------------------	---------------------	-----	------------

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363439-1 WG363439-2

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		113		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	98		103		70-130
Dibromofluoromethane	104		106		70-130

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS	MSD Found	MSD	Recovery	RPD	RPD Limits
				%Recovery		%Recovery	Limits		
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363415-3 QC Sample: L0906386-01 Client ID: GROUNDWATER									
1,2-Dibromoethane	ND	0.241	0.188	78	-	-	70-130	-	20

# SEMIVOLATILES

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water  
**Analytical Method:** 1,8270C  
**Analytical Date:** 05/21/09 13:19  
**Analyst:** HL

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/20/09 07:08

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>					
Acenaphthene	0.25		ug/l	0.20	1
Fluoranthene	0.29		ug/l	0.20	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	0.29		ug/l	0.20	1
Pentachlorophenol	ND		ug/l	0.80	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	18		15-120
2,4,6-Tribromophenol	118		10-120
4-Terphenyl-d14	90		33-120

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water  
**Analytical Method:** 1,8270C  
**Analytical Date:** 05/22/09 15:12  
**Analyst:** AK

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
-----------	--------	-----------	-------	-----	-----------------

## Semivolatile Organics by GC/MS - Westborough Lab

Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0	1
Butyl benzyl phthalate	ND		ug/l	5.0	1
Di-n-butylphthalate	ND		ug/l	5.0	1
Di-n-octylphthalate	ND		ug/l	5.0	1
Diethyl phthalate	ND		ug/l	5.0	1
Dimethyl phthalate	ND		ug/l	5.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	65		15-120
4-Terphenyl-d14	104		33-120

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 05/21/09 11:49  
**Analyst:** HL

**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/20/09 07:08

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG363130-1				
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
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:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 05/21/09 11:49  
 Analyst: HL

Extraction Method: EPA 3510C  
 Extraction Date: 05/20/09 07:08

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG363130-1				

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	93		33-120

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 05/22/09 13:39  
Analyst: AK

Extraction Method: EPA 3510C  
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Acenaphthene	ND		ug/l	5.0
Benzidine	ND		ug/l	50
1,2,4-Trichlorobenzene	ND		ug/l	5.0
Hexachlorobenzene	ND		ug/l	5.0
Bis(2-chloroethyl)ether	ND		ug/l	5.0
2-Chloronaphthalene	ND		ug/l	6.0
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
Fluoranthene	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
Hexachlorobutadiene	ND		ug/l	10
Hexachlorocyclopentadiene	ND		ug/l	30
Hexachloroethane	ND		ug/l	5.0
Isophorone	ND		ug/l	5.0
Naphthalene	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

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 05/22/09 13:39  
Analyst: AK

Extraction Method: EPA 3510C  
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Benzo(a)anthracene	ND		ug/l	5.0
Benzo(a)pyrene	ND		ug/l	5.0
Benzo(b)fluoranthene	ND		ug/l	5.0
Benzo(k)fluoranthene	ND		ug/l	5.0
Chrysene	ND		ug/l	5.0
Acenaphthylene	ND		ug/l	5.0
Anthracene	ND		ug/l	5.0
Benzo(ghi)perylene	ND		ug/l	5.0
Fluorene	ND		ug/l	5.0
Phenanthrene	ND		ug/l	5.0
Dibenzo(a,h)anthracene	ND		ug/l	5.0
Indeno(1,2,3-cd)Pyrene	ND		ug/l	7.0
Pyrene	ND		ug/l	5.0
Aniline	ND		ug/l	20
4-Chloroaniline	ND		ug/l	5.0
1-Methylnaphthalene	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
2-Methylnaphthalene	ND		ug/l	5.0
n-Nitrosodimethylamine	ND		ug/l	50
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

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 05/22/09 13:39  
Analyst: AK

Extraction Method: EPA 3510C  
Extraction Date: 05/22/09 07:28

Parameter	Result	Qualifier	Units	RDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG363533-1				
Pentachlorophenol	ND		ug/l	10
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	57		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	113		33-120

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG363130-2 WG363130-3					
Acenaphthene	69	67	40-140	3	40
2-Chloronaphthalene	69	56	40-140	21	40
Fluoranthene	91	94	40-140	3	40
Anthracene	80	77	40-140	4	40
Pyrene	90	95	40-140	5	40
Pentachlorophenol	45	30	30-130	40	40

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		48		21-120
Phenol-d6	36		31		10-120
Nitrobenzene-d5	81		73		23-120
2-Fluorobiphenyl	71		55		15-120
2,4,6-Tribromophenol	96		90		10-120
4-Terphenyl-d14	94		100		33-120

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Project Number:** 60590

**Lab Number:** L0906386

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363533-2 WG363533-3					
Acenaphthene	77	75	46-118	3	30
1,2,4-Trichlorobenzene	64	66	39-98	3	30
2-Chloronaphthalene	77	79	40-140	3	30
1,2-Dichlorobenzene	61	69	40-140	12	30
1,4-Dichlorobenzene	59	66	36-97	11	30
2,4-Dinitrotoluene	98	92	24-96	6	30
2,6-Dinitrotoluene	82	80	40-140	2	30
Fluoranthene	106	99	40-140	7	30
4-Chlorophenyl phenyl ether	78	84	40-140	7	30
n-Nitrosodi-n-propylamine	72	77	41-116	7	30
Butyl benzyl phthalate	100	94	40-140	6	30
Anthracene	89	84	40-140	6	30
Pyrene	100	94	26-127	6	30
P-Chloro-M-Cresol	74	78	23-97	5	30
2-Chlorophenol	63	70	27-123	11	30
2-Nitrophenol	71	76	30-130	7	30
4-Nitrophenol	58	54	10-80	7	30
2,4-Dinitrophenol	59	54	30-130	9	30
Pentachlorophenol	66	58	9-103	13	30
Phenol	39	44	12-110	12	30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
-----------	------------------	-------------------	---------------------	-----	------------

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG363533-2 WG363533-3

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		57		21-120
Phenol-d6	39		42		10-120
Nitrobenzene-d5	72		73		23-120
2-Fluorobiphenyl	78		78		15-120
2,4,6-Tribromophenol	107		103		10-120
4-Terphenyl-d14	108		97		33-120

# PCBS

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water  
**Analytical Method:** 5,608  
**Analytical Date:** 05/21/09 11:41  
**Analyst:** JB

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 05/20/09 14:27  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 05/21/09

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
-----------	--------	-----------	-------	-----	-----------------

Polychlorinated Biphenyls by GC - Westborough Lab					
Aroclor 1016	ND		ug/l	0.263	1
Aroclor 1221	ND		ug/l	0.263	1
Aroclor 1232	ND		ug/l	0.263	1
Aroclor 1242	ND		ug/l	0.263	1
Aroclor 1248	ND		ug/l	0.263	1
Aroclor 1254	ND		ug/l	0.263	1
Aroclor 1260	ND		ug/l	0.263	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	40		30-150	A

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 5,608  
 Analytical Date: 05/21/09 10:49  
 Analyst: JB

Extraction Method: EPA 3510C  
 Extraction Date: 05/20/09 14:27  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 05/21/09

Parameter	Result	Qualifier	Units	RDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG363203-1				
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	66		30-150	A
Decachlorobiphenyl	79		30-150	A

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363203-3 QC Sample: L0906386-01 Client ID:										
GROUNDWATER										
Aroclor 1016	ND	2.1	1.21	58	-	-		40-126	-	30
Aroclor 1260	ND	2.1	1.15	55	-	-		40-127	-	30

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	66				30-150	A
Decachlorobiphenyl	55				30-150	A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG363203-2					
Aroclor 1016	66	-	40-126	-	
Aroclor 1260	65	-	40-127	-	

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78				30-150	A
Decachlorobiphenyl	44				30-150	A

## Lab Duplicate Analysis

Batch Quality Control

Project Name: PERFORMANCE CONTRACTING

Project Number: 60590

Lab Number: L0906386

Report Date: 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363203-4 QC Sample: L0906386-01 Client ID: GROUNDWATER					
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	64		73		30-150	A
Decachlorobiphenyl	40		55		30-150	A

# METALS

**Project Name:** PERFORMANCE CONTRACTING**Lab Number:** L0906386**Project Number:** 60590**Report Date:** 05/26/09**SAMPLE RESULTS**

Lab ID: L0906386-01  
 Client ID: GROUNDWATER  
 Sample Location: 225 MAIN STREET, NORTHBRIDGE  
 Matrix: Water

Date Collected: 05/19/09 16:00  
 Date Received: 05/19/09  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>										
Chromium, Total	0.0039		mg/l	0.0005	1	05/22/09 08:45	05/22/09 15:42	EPA 3005A	1,6020	BM
<b>Dissolved Metals - Westborough Lab</b>										
Antimony, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Arsenic, Dissolved	0.0019		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Cadmium, Dissolved	ND		mg/l	0.0002	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Chromium, Dissolved	ND		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Copper, Dissolved	ND		mg/l	0.0020	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Iron, Dissolved	4.0		mg/l	0.05	1	05/21/09 12:00	05/21/09 20:05	EPA 3005A	19,200.7	AI
Lead, Dissolved	0.0006		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Mercury, Dissolved	ND		mg/l	0.0002	1	05/21/09 12:05	05/21/09 15:21	EPA 245.2	3,245.1	EZ
Nickel, Dissolved	0.003		mg/l	0.0005	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Selenium, Dissolved	ND		mg/l	0.001	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Silver, Dissolved	ND		mg/l	0.0004	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM
Zinc, Dissolved	0.0121		mg/l	0.0100	1	05/20/09 11:30	05/21/09 14:58	EPA 3005A	1,6020	BM



Project Name: PERFORMANCE CONTRACTING

Lab Number: L0906386

Project Number: 60590

Report Date: 05/26/09

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363221-1								
Antimony, Dissolved	ND	mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Arsenic, Dissolved	ND	mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Cadmium, Dissolved	ND	mg/l	0.0002	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Chromium, Dissolved	ND	mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Copper, Dissolved	ND	mg/l	0.0020	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Lead, Dissolved	ND	mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Nickel, Dissolved	ND	mg/l	0.0005	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Selenium, Dissolved	ND	mg/l	0.001	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Silver, Dissolved	ND	mg/l	0.0004	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM
Zinc, Dissolved	ND	mg/l	0.0100	1	05/20/09 11:30	05/21/09 15:18	1,6020	BM

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363398-1								
Mercury, Dissolved	ND	mg/l	0.0002	1	05/21/09 12:05	05/21/09 15:16	3,245.1	EZ

### Prep Information

Digestion Method: EPA 245.2

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG363433-1								
Iron, Dissolved	ND	mg/l	0.05	1	05/21/09 12:00	05/21/09 19:56	19,200.7	AI

### Prep Information

Digestion Method: EPA 3005A



Project Name: PERFORMANCE CONTRACTING

Lab Number: L0906386

Project Number: 60590

Report Date: 05/26/09

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG363594-5								
Chromium, Total	ND	mg/l	0.0005	1	05/22/09 08:45	05/22/09 15:07	1,6020	BM

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Project Number:** 60590

**Lab Number:** L0906386

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
<b>Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363221-2</b>					
Antimony, Dissolved	99	-	80-120	-	
Arsenic, Dissolved	97	-	80-120	-	
Cadmium, Dissolved	109	-	80-120	-	
Chromium, Dissolved	105	-	80-120	-	
Copper, Dissolved	108	-	80-120	-	
Lead, Dissolved	103	-	80-120	-	
Nickel, Dissolved	105	-	80-120	-	
Selenium, Dissolved	99	-	80-120	-	
Silver, Dissolved	100	-	80-120	-	
Zinc, Dissolved	111	-	80-120	-	
<b>Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363398-2</b>					
Mercury, Dissolved	104	-		-	
<b>Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG363433-2</b>					
Iron, Dissolved	110	-		-	
<b>Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG363594-6</b>					
Chromium, Total	94	-	80-120	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363221-4 QC Sample: L0906386-01 Client ID: GROUNDWATER										
Antimony, Dissolved	ND	0.5	0.4951	99	-	-	80-120	-	20	
Arsenic, Dissolved	0.0019	0.12	0.1285	105	-	-	80-120	-	20	
Cadmium, Dissolved	ND	0.051	0.0546	107	-	-	80-120	-	20	
Chromium, Dissolved	ND	0.2	0.2127	106	-	-	80-120	-	20	
Copper, Dissolved	ND	0.25	0.2691	108	-	-	80-120	-	20	
Lead, Dissolved	0.0006	0.51	0.5400	106	-	-	80-120	-	20	
Nickel, Dissolved	0.003	0.5	0.5301	105	-	-	80-120	-	20	
Selenium, Dissolved	ND	0.12	0.124	103	-	-	80-120	-	20	
Silver, Dissolved	ND	0.05	0.0496	99	-	-	80-120	-	20	
Zinc, Dissolved	0.0121	0.5	0.5571	109	-	-	80-120	-	20	
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363398-4 QC Sample: L0906386-01 Client ID: GROUNDWATER										
Mercury, Dissolved	ND	0.001	0.0010	99	-	-		-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363433-4 QC Sample: L0906386-01 Client ID: GROUNDWATER										
Iron, Dissolved	4.0	1	5.4	140	-	-		-		
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363594-8 QC Sample: L0906386-01 Client ID: GROUNDWATER										
Chromium, Total	0.0039	0.2	0.2103	103	-	-	80-120	-	20	

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Project Number:** 60590

**Lab Number:** L0906386

**Report Date:** 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363221-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Antimony, Dissolved	ND	ND	mg/l	NC	20
Arsenic, Dissolved	0.0019	0.0020	mg/l	1	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	0.0006	0.0006	mg/l	3	20
Nickel, Dissolved	0.003	0.0032	mg/l	6	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.0121	0.0125	mg/l	3	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363398-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Mercury, Dissolved	ND	ND	mg/l	NC	
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363433-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Iron, Dissolved	4.0	4.0	mg/l	0	
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363594-7 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chromium, Total	0.0039	0.0039	mg/l	0	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

### SAMPLE RESULTS

**Lab ID:** L0906386-01  
**Client ID:** GROUNDWATER  
**Sample Location:** 225 MAIN STREET, NORTHBRIDGE  
**Matrix:** Water

**Date Collected:** 05/19/09 16:00  
**Date Received:** 05/19/09  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Solids, Total Suspended	62		mg/l	5.0	1	-	05/20/09 14:35	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	1	05/20/09 14:35	05/20/09 18:48	30,4500CN-CE	DD
Chlorine, Total Residual	ND		mg/l	0.02	1	-	05/20/09 00:01	30,4500CL-D	JO
TPH	ND		mg/l	4.40	1.1	05/19/09 20:00	05/20/09 21:45	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	1	-	05/20/09 17:31	4,420.1	TH
Chromium, Hexavalent	ND		mg/l	0.010	1	05/20/09 01:00	05/20/09 01:00	30,3500CR-D	JT
<b>General Chemistry</b>									
Trivalent Chromium	ND		mg/l	0.01	1	-	05/22/09 15:00	30,3500-Cr	ED



Project Name: PERFORMANCE CONTRACTING

Lab Number: L0906386

Project Number: 60590

Report Date: 05/26/09

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363088-2								
TPH	ND	mg/l	4.00	1	05/19/09 20:00	05/20/09 21:45	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363115-2								
Chlorine, Total Residual	ND	mg/l	0.02	1	-	05/20/09 00:01	30,4500CL-D	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363119-1								
Chromium, Hexavalent	ND	mg/l	0.010	1	05/20/09 01:00	05/20/09 01:00	30,3500CR-D	JT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363165-1								
Solids, Total Suspended	ND	mg/l	5.0	1	-	05/20/09 14:35	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363207-1								
Cyanide, Total	ND	mg/l	0.005	1	05/20/09 14:35	05/20/09 18:37	30,4500CN-CE	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG363258-1								
Phenolics, Total	ND	mg/l	0.03	1	-	05/20/09 17:25	4,420.1	TH

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Lab Number:** L0906386

**Project Number:** 60590

**Report Date:** 05/26/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363088-1					
TPH	85	-	64-132	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363115-1					
Chlorine, Total Residual	93	-		-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363119-2					
Chromium, Hexavalent	102	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363207-2					
Cyanide, Total	94	-	80-120	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG363258-2					
Phenolics, Total	99	-	82-111	-	12

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

Parameter	Native Sample	MS Added	MS Found	MS	MSD Found	MSD	Recovery Limits	RPD	RPD Limits
				%Recovery		%Recovery			
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363088-3 QC Sample: L0906322-01 Client ID: MS Sample									
TPH	ND	22.7	ND	87	-	-	64-132	-	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363119-4 QC Sample: L0906386-01 Client ID: GROUNDWATER									
Chromium, Hexavalent	ND	0.1	0.099	99	-	-	85-115	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363207-4 QC Sample: L0906189-02 Client ID: MS Sample									
Cyanide, Total	ND	0.2	0.187	94	-	-	80-120	-	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363258-3 QC Sample: L0906322-01 Client ID: MS Sample									
Phenolics, Total	ND	0.8	0.80	100	-	-	77-124	-	12

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** PERFORMANCE CONTRACTING

**Project Number:** 60590

**Lab Number:** L0906386

**Report Date:** 05/26/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363088-4 QC Sample: L0906322-02 Client ID: DUP Sample					
TPH	ND	ND	mg/l	NC	34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363115-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chlorine, Total Residual	ND	ND	mg/l	NC	
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363119-3 QC Sample: L0906386-01 Client ID: GROUNDWATER					
Chromium, Hexavalent	ND	ND	mg/l	NC	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363165-2 QC Sample: L0906390-01 Client ID: DUP Sample					
Solids, Total Suspended	140	150	mg/l	7	32
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363207-3 QC Sample: L0906189-02 Client ID: DUP Sample					
Cyanide, Total	ND	ND	mg/l	NC	30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG363258-4 QC Sample: L0906322-02 Client ID: DUP Sample					
Phenolics, Total	0.14	0.15	mg/l	7	12

Project Name: PERFORMANCE CONTRACTING

Lab Number: L0906386

Project Number: 60590

Report Date: 05/26/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0906386-01A	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	504(14)
L0906386-01B	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	504(14)
L0906386-01C	Vial HCl preserved	A	N/A	10.4	Y	Absent	8260(14)
L0906386-01D	Vial HCl preserved	A	N/A	10.4	Y	Absent	8260(14)
L0906386-01E	Amber 1000ml unpreserved	A	7	10.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L0906386-01F	Amber 1000ml unpreserved	A	7	10.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L0906386-01G	Plastic 1000ml unpreserved	A	7	10.4	Y	Absent	TSS-2540(7)
L0906386-01H	Plastic 1000ml unpreserved	A	7	10.4	Y	Absent	SPECWC(),CR-6020T(180),HEXCR-3500(1),TRC-4500(1)
L0906386-01I	Amber 1000ml H2SO4 preserved	A	<2	10.4	Y	Absent	TPHENOL-420(28)
L0906386-01J	Amber 1000ml H2SO4 preserved	A	<2	10.4	Y	Absent	TPHENOL-420(28)
L0906386-01K	Amber 1000ml HCl preserved	A	<2	10.4	Y	Absent	TPH-1664(28)
L0906386-01L	Amber 1000ml HCl preserved	A	<2	10.4	Y	Absent	TPH-1664(28)
L0906386-01M	Amber 1000ml Na2S2O3	A	7	10.4	Y	Absent	PCB-608(7)
L0906386-01N	Amber 1000ml Na2S2O3	A	7	10.4	Y	Absent	PCB-608(7)
L0906386-01O	Plastic 250ml NaOH preserved	A	>12	10.4	Y	Absent	TCN-4500(14)
L0906386-01P	Plastic 500ml unpreserved	A	7	10.4	Y	Absent	-
L0906386-01X	Plastic 500ml HNO3 preserved spl	A	<2	10.4	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L0906386-01Y	Plastic 250ml HNO3 preserved spl	A	<2	10.4	Y	Absent	-
L0906386-01Z	Plastic 250ml HNO3 preserved spl	A	<2	10.4	Y	Absent	CR-6020T(180)
L0906386-02A	Vial Na2S2O3 preserved	A	N/A	10.4	Y	Absent	HOLD(14)
L0906386-02B	Vial HCl preserved	A	N/A	10.4	Y	Absent	HOLD(14)

\*Hold days indicated by values in parentheses



**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

## 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.
- 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.
- ND** - Not detected at the reported detection limit for the sample.
- NI** - Not Ignitable.
- RDL** - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**Project Name:** PERFORMANCE CONTRACTING  
**Project Number:** 60590

**Lab Number:** L0906386  
**Report Date:** 05/26/09

## 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 Woods Hole Labs 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 Woods Hole Labs.

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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-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, 4500CI-D, 4500CI-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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307.**

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

**New York Department of Health Certificate/Lab ID: 11148.**

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**

