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September 30, 2009

Mr. David Dorian  
U.S. EPA, Region 4  
On-Scene Coordinator  
61 Forsyth Street, S.W. (11th Floor)  
Atlanta, Georgia 30303

RE: Mills Gap Groundwater Contamination Site  
CERCLA Docket No. CER-04-2004-3755  
Monthly Progress Report, Number 64  
Near Skyland, Buncombe County, North Carolina  
MACTEC Project 6690-03-9450

Dear Mr. Dorian:

In accordance with the Administrative Order on Consent (AOC) and Scope of Work for the removal action at the Mills Gap Groundwater Contamination Site, enclosed for your review is the progress report for the month of August 2009.

If you have any questions, please feel free to call either Marv Gobles at (574) 293-7511, or me at (828) 252-8130.

Sincerely,

A handwritten signature in black ink that reads "Matthew E. Wallace".

Matthew E. Wallace, P.E.  
Project Coordinator

Attachments

cc: Marvin Gobles, CTS Corporation  
Elizabeth Bottorff Ahlemann, CTS Corporation  
Michael F. Dolan, Esq., Jones Day  
William Clarke, Robert & Stevens, P.A.



# **Mills Gap Groundwater Contamination Site**

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## **Monthly Progress Report**

**Reporting Period: August 2009**  
**CERCLA Docket No. CER-04-2004-3755**

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This monthly report has been prepared in accordance with requirements specified in the Scope of Work (SOW) contained in the Administrative Order on Consent (AOC) for Removal Action issued by the USEPA.

### **1) Significant developments during the preceding period:**

- On August 26, 2009, MACTEC submitted the July 2009 monthly progress report to USEPA.
- Operational and maintenance activities were performed and an air sample was collected from the soil vapor extraction (SVE) system discharge on July 20, 2009. An estimated 77 pounds of volatile organic compounds (VOCs) were removed by the SVE system in July 2009.
- Activities related to implementing the Supplemental Removal Action Plan were performed including collection of monthly pilot study spring and surface water samples and operational and maintenance activities related to the ozone pilot study equipment.

### **2) Developments from the present reporting period:**

- Operational and maintenance activities were performed and an air sample was collected from the SVE system discharge on August 21, 2009. The SVE system operated for approximately 468 hours during the month of August 2009. An estimated 136 pounds of VOCs were removed by the SVE system in August 2009. There is an overall decreasing concentration trend of VOCs since the system's initial operation, as anticipated. Analytical data from the SVE air discharge sampling performed during the period includes:
  - SGS Environmental Services, Inc. Report G132-2091, dated September 8, 2009 (sample collected August 21, 2009).
- An estimated 6,309 pounds of VOCs have been removed by the SVE system since its initial operation on July 20, 2006.
- The following activities related to implementing the Supplemental Removal Action Plan were performed:
  - Collection of monthly spring and surface water samples; and
  - Operational and maintenance activities related to the ozone pilot study equipment.
- Analytical data from the ozone pilot study received during this period includes:
  - Prism Laboratories, Inc. Report G0809050, dated August 22, 2009. Sample identifications referenced in the laboratory report correspond to the historically-established sampling locations described in previous monthly status reports.

### **3) Developments anticipated during the next reporting period:**

- Monthly scheduled operational and maintenance activities will be performed for the SVE system.
- Monthly air sampling of the SVE system air discharge will be performed.
- Scheduled operational and maintenance activities related to the ozone pilot study will be performed.
- Monthly spring and surface water sampling related to the ozone injection pilot study will be performed.
- An evaluation of the pilot study data collected to date will be performed.



SGS North America, Inc.

Susan Kelly  
Mactec  
1308C Patton Ave.  
Asheville, NC 28806

Report Number: G132-2091

Client Project: Mills Gap Road Site

Dear Susan Kelly,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,  
SGS North America, Inc.

Barbara Hager      Sept 8. 2009  
Project Manager      Date  
Barbara Hager

SGS North America, Inc.

List of Reporting Abbreviations  
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are  $10\% < \%R < LCL$ ; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% soilds = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

## SGS North America, Inc.

**Results for Volatiles in Air**  
by GC/MS

Client Sample ID: MG-46A  
 Client Project ID: Mills Gap Road Site  
 Lab Sample ID: G132-2091-1A  
 Lab Project ID: G132-2091

Analyzed By: EAW  
 Date Collected: 8/21/2009 11:07  
 Date Received: 8/21/2009  
 Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	10	10	9/3/2009
Bromochloromethane	BQL	10	10	9/3/2009
Bromodichloromethane	BQL	10	10	9/3/2009
Bromoform	BQL	10	10	9/3/2009
Carbon tetrachloride	BQL	10	10	9/3/2009
Chlorobenzene	BQL	10	10	9/3/2009
Chloroform	BQL	10	10	9/3/2009
Dibromochloromethane	BQL	10	10	9/3/2009
1,2-Dibromoethane (EDB)	BQL	10	10	9/3/2009
1,2-Dichlorobenzene	BQL	10	10	9/3/2009
1,3-Dichlorobenzene	BQL	10	10	9/3/2009
1,4-Dichlorobenzene	BQL	10	10	9/3/2009
1,1-Dichloroethane	BQL	10	10	9/3/2009
1,1-Dichloroethene	BQL	10	10	9/3/2009
1,2-Dichloroethane	BQL	10	10	9/3/2009
cis-1,2-Dichloroethene	BQL	10	10	9/3/2009
trans-1,2-dichloroethene	BQL	10	10	9/3/2009
1,2-Dichloropropane	BQL	10	10	9/3/2009
cis-1,3-Dichloropropene	BQL	10	10	9/3/2009
trans-1,3-Dichloropropene	BQL	10	10	9/3/2009
Diisopropyl ether	BQL	10	10	9/3/2009
Ethylbenzene	BQL	10	10	9/3/2009
Methyl-tert-butyl ether	BQL	10	10	9/3/2009
Styrene	BQL	10	10	9/3/2009
1,1,2,2-Tetrachloroethane	BQL	10	10	9/3/2009
Tetrachloroethene	BQL	10	10	9/3/2009
Toluene	BQL	10	10	9/3/2009
Trichloroethene	191	10	10	9/3/2009
1,1,1-Trichloroethane	BQL	10	10	9/3/2009
1,1,2-Trichloroethane	BQL	10	10	9/3/2009
m,p-Xylene	BQL	20	10	9/3/2009
o-Xylene	BQL	10	10	9/3/2009

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: MM

## SGS North America, Inc.

Results for Volatiles in Air  
by GC/MS

Client Sample ID: MG-46B  
 Client Project ID: Mills Gap Road Site  
 Lab Sample ID: G132-2091-2A  
 Lab Project ID: G132-2091

Analyzed By: EAW  
 Date Collected: 8/20/2009 11:07  
 Date Received: 8/21/2009  
 Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	0.4	1	9/3/2009
Bromochloromethane	BQL	0.4	1	9/3/2009
Bromodichloromethane	BQL	0.4	1	9/3/2009
Bromoform	BQL	0.4	1	9/3/2009
Carbon tetrachloride	BQL	0.4	1	9/3/2009
Chlorobenzene	BQL	0.4	1	9/3/2009
Chloroform	BQL	0.4	1	9/3/2009
Dibromochloromethane	BQL	0.4	1	9/3/2009
1,2-Dibromoethane (EDB)	BQL	0.4	1	9/3/2009
1,2-Dichlorobenzene	BQL	0.4	1	9/3/2009
1,3-Dichlorobenzene	BQL	0.4	1	9/3/2009
1,4-Dichlorobenzene	BQL	0.4	1	9/3/2009
1,1-Dichloroethane	BQL	0.4	1	9/3/2009
1,1-Dichloroethene	BQL	0.4	1	9/3/2009
1,2-Dichloroethane	BQL	0.4	1	9/3/2009
cis-1,2-Dichloroethene	BQL	0.4	1	9/3/2009
trans-1,2-dichloroethene	BQL	0.4	1	9/3/2009
1,2-Dichloropropane	BQL	0.4	1	9/3/2009
cis-1,3-Dichloropropene	BQL	0.4	1	9/3/2009
trans-1,3-Dichloropropene	BQL	0.4	1	9/3/2009
Diisopropyl ether	BQL	0.4	1	9/3/2009
Ethylbenzene	BQL	0.4	1	9/3/2009
Methyl-tert-butyl ether	BQL	0.4	1	9/3/2009
Styrene	BQL	0.4	1	9/3/2009
1,1,2,2-Tetrachloroethane	BQL	0.4	1	9/3/2009
Tetrachloroethene	BQL	0.4	1	9/3/2009
Toluene	BQL	0.4	1	9/3/2009
Trichloroethene	BQL	0.4	1	9/3/2009
1,1,1-Trichloroethane	BQL	0.4	1	9/3/2009
1,1,2-Trichloroethane	BQL	0.4	1	9/3/2009
m-,p-Xylene	BQL	0.8	1	9/3/2009
o-Xylene	BQL	0.4	1	9/3/2009

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: MM

1. BQL = Below quantitation limit.  
 2. m,p-Xylene  
 3. o-Xylene  
 4. 1,1,2,2-Tetrachloroethane  
 5. 1,1,2-Trichloroethane  
 6. 1,1,1-Trichloroethane

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: MG-46A (and B)  
Client Project ID: Mills Gap Road Site  
Lab Sample ID: G132-2091-3 and -4  
Lab Project ID: G132-2091

Analyzed By: BWS  
Date Collected: 8/20/2009 11:20  
Date Received: 8/21/2009  
Matrix: Air

Analyte	Result mg/m <sup>3</sup>	RL mg/m <sup>3</sup>	Prep Method	Dilution Factor	Date Analyzed
Initial Tube: Diesel Range Organics	3.74	10	MM18	1	08/26/09
Breakthrough tube: Diesel Range Organics	BQL	4	MM18	1	08/26/09

Comments:

Flags:



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- Hawaii
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- North Carolina
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082055

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## Case Narrative

Date: 08/22/09  
Company: MACTEC Eng. & Consulting, Inc  
Contact: Susan Kelly  
Address: 1308 Patton Avenue  
Asheville, NC 28806

Client Project ID: Mills Gap  
Prism COC Group No: G0809050  
Collection Date(s): 08/03/09  
Lab Submittal Date(s): 08/04/09

This data package contains the analytical results for the project identified above and includes a Case Narrative, Laboratory Report and Quality Control Data totaling 24 pages. A chain-of-custody is also attached for the samples submitted to Prism for this project.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative. Quality control statements and/or sample specific remarks are included in the sample comments section of the laboratory report for each sample affected.

### Semi Volatile Analysis

N/A

### Volatile Analysis

No Anomalies Reported

### Metals Analysis

N/A

### Wet Lab and Micro Analysis

N/A

Please call if you have any questions relating to this analytical report.

Data Reviewed by: Steven H. Guptill

Project Manager: Steven H. Guptill

Signature:

Signature:

Review Date: 08/22/09

Approval Date: 08/22/09

### **Data Qualifiers Key Reference:**

B: Compound also detected in the method blank.

#: Result outside of the QC limits.

DO: Compound diluted out.

E: Estimated concentration, calibration range exceeded.

J: The analyte was positively identified but the value is estimated below the reporting limit.

H: Estimated concentration with a high bias.

L: Estimated concentration with a low bias.

M: A matrix effect is present.

Notes: This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc. The results in this report relate only to the samples submitted for analysis.



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SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-01 (DS)  
Prism Sample ID: 253929  
COC Group: G0809050  
Time Collected: 08/03/09 10:25  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b>Volatile Organic Compounds by GC/MS</b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	1.0	0.087	1	8260B	08/15/09 2:14	erussell	Q43777
1,1,1-Trichloroethane	BRL	µg/L	1.0	0.053	1	8260B	08/15/09 2:14	erussell	Q43777
1,1,2,2-Tetrachloroethane	BRL	µg/L	1.0	0.071	1	8260B	08/15/09 2:14	erussell	Q43777
1,1,2-Trichloroethane	BRL	µg/L	1.0	0.092	1	8260B	08/15/09 2:14	erussell	Q43777
1,1-Dichloroethane	BRL	µg/L	1.0	0.053	1	8260B	08/15/09 2:14	erussell	Q43777
1,1-Dichloroethene	BRL	µg/L	1.0	0.046	1	8260B	08/15/09 2:14	erussell	Q43777
1,1-Dichloropropene	BRL	µg/L	1.0	0.089	1	8260B	08/15/09 2:14	erussell	Q43777
1,2,3-Trichlorobenzene	BRL	µg/L	2.0	0.23	1	8260B	08/15/09 2:14	erussell	Q43777
1,2,3-Trichloropropane	BRL	µg/L	1.0	0.15	1	8260B	08/15/09 2:14	erussell	Q43777
1,2,4-Trichlorobenzene	BRL	µg/L	1.0	0.28	1	8260B	08/15/09 2:14	erussell	Q43777
1,2,4-Trimethylbenzene	BRL	µg/L	1.0	0.14	1	8260B	08/15/09 2:14	erussell	Q43777
1,2-Dibromo-3-chloropropane	BRL	µg/L	2.0	0.37	1	8260B	08/15/09 2:14	erussell	Q43777
1,2-Dibromoethane (EDB)	BRL	µg/L	1.0	0.11	1	8260B	08/15/09 2:14	erussell	Q43777
1,2-Dichlorobenzene	BRL	µg/L	1.0	0.094	1	8260B	08/15/09 2:14	erussell	Q43777
1,2-Dichloroethane	BRL	µg/L	1.0	0.072	1	8260B	08/15/09 2:14	erussell	Q43777
1,2-Dichloropropane	BRL	µg/L	1.0	0.081	1	8260B	08/15/09 2:14	erussell	Q43777
1,3,5-Trimethylbenzene	BRL	µg/L	1.0	0.081	1	8260B	08/15/09 2:14	erussell	Q43777
1,3-Dichlorobenzene	BRL	µg/L	1.0	0.10	1	8260B	08/15/09 2:14	erussell	Q43777
1,3-Dichloropropane	BRL	µg/L	1.0	0.062	1	8260B	08/15/09 2:14	erussell	Q43777
1,4-Dichlorobenzene	BRL	µg/L	1.0	0.092	1	8260B	08/15/09 2:14	erussell	Q43777
2,2-Dichloropropane	BRL	µg/L	2.0	0.21	1	8260B	08/15/09 2:14	erussell	Q43777
2-Chloroethyl vinyl ether	BRL	µg/L	2.0	0.37	1	8260B	08/15/09 2:14	erussell	Q43777
2-Chlorotoluene	BRL	µg/L	1.0	0.090	1	8260B	08/15/09 2:14	erussell	Q43777
2-Hexanone	BRL	µg/L	5.0	0.20	1	8260B	08/15/09 2:14	erussell	Q43777
4-Chlorotoluene	BRL	µg/L	1.0	0.13	1	8260B	08/15/09 2:14	erussell	Q43777
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	5.0	0.93	1	8260B	08/15/09 2:14	erussell	Q43777
Acetone	BRL	µg/L	10	1.0	1	8260B	08/15/09 2:14	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-01 (DS)  
Prism Sample ID: 253929  
COC Group: G0809050  
Time Collected: 08/03/09 10:25  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	100	1.4	1	8260B	08/15/09 2:14	erussell	Q43777
Acrylonitrile	BRL	µg/L	100	1.4	1	8260B	08/15/09 2:14	erussell	Q43777
Benzene	BRL	µg/L	1.0	0.044	1	8260B	08/15/09 2:14	erussell	Q43777
Bromobenzene	BRL	µg/L	1.0	0.098	1	8260B	08/15/09 2:14	erussell	Q43777
Bromochloromethane	BRL	µg/L	1.0	0.14	1	8260B	08/15/09 2:14	erussell	Q43777
Bromodichloromethane	BRL	µg/L	1.0	0.076	1	8260B	08/15/09 2:14	erussell	Q43777
Bromoform	BRL	µg/L	1.0	0.039	1	8260B	08/15/09 2:14	erussell	Q43777
Bromomethane	BRL	µg/L	3.0	0.27	1	8260B	08/15/09 2:14	erussell	Q43777
Carbon disulfide	BRL	µg/L	5.0	0.37	1	8260B	08/15/09 2:14	erussell	Q43777
Carbon tetrachloride	BRL	µg/L	2.0	0.11	1	8260B	08/15/09 2:14	erussell	Q43777
Chlorobenzene	BRL	µg/L	1.0	0.050	1	8260B	08/15/09 2:14	erussell	Q43777
Chlorodibromomethane	BRL	µg/L	1.0	0.070	1	8260B	08/15/09 2:14	erussell	Q43777
Chloroethane	BRL	µg/L	5.0	0.22	1	8260B	08/15/09 2:14	erussell	Q43777
Chloroform	BRL	µg/L	1.0	0.049	1	8260B	08/15/09 2:14	erussell	Q43777
Chloromethane	BRL	µg/L	2.0	0.30	1	8260B	08/15/09 2:14	erussell	Q43777
cis-1,2-Dichloroethene	0.67 J	µg/L	1.0	0.054	1	8260B	08/15/09 2:14	erussell	Q43777
cis-1,3-Dichloropropene	BRL	µg/L	1.0	0.070	1	8260B	08/15/09 2:14	erussell	Q43777
Dibromomethane	BRL	µg/L	1.0	0.21	1	8260B	08/15/09 2:14	erussell	Q43777
Dichlorodifluoromethane	BRL	µg/L	2.0	0.30	1	8260B	08/15/09 2:14	erussell	Q43777
Ethylbenzene	BRL	µg/L	1.0	0.085	1	8260B	08/15/09 2:14	erussell	Q43777
Hexachlorobutadiene	BRL	µg/L	2.0	0.30	1	8260B	08/15/09 2:14	erussell	Q43777
Isopropyl ether (IPE)	BRL	µg/L	1.0	0.076	1	8260B	08/15/09 2:14	erussell	Q43777
Isopropylbenzene	BRL	µg/L	1.0	0.10	1	8260B	08/15/09 2:14	erussell	Q43777
m,p-Xylenes	BRL	µg/L	2.0	0.13	1	8260B	08/15/09 2:14	erussell	Q43777
Methyl ethyl ketone (MEK)	BRL	µg/L	5.0	0.95	1	8260B	08/15/09 2:14	erussell	Q43777
Methyl t-butyl ether (MTBE)	BRL	µg/L	1.0	0.11	1	8260B	08/15/09 2:14	erussell	Q43777
Methylene chloride	BRL	µg/L	2.0	0.081	1	8260B	08/15/09 2:14	erussell	Q43777

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# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-01 (DS)  
Prism Sample ID: 253929  
COC Group: G0809050  
Time Collected: 08/03/09 10:25  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	1.0	0.24	1	8260B	08/15/09 2:14	erussell	Q43777
n-Propylbenzene	BRL	µg/L	1.0	0.087	1	8260B	08/15/09 2:14	erussell	Q43777
Naphthalene	BRL	µg/L	1.0	0.23	1	8260B	08/15/09 2:14	erussell	Q43777
o-Xylene	BRL	µg/L	1.0	0.059	1	8260B	08/15/09 2:14	erussell	Q43777
p-Isopropyltoluene	BRL	µg/L	1.0	0.14	1	8260B	08/15/09 2:14	erussell	Q43777
sec-Butylbenzene	BRL	µg/L	1.0	0.12	1	8260B	08/15/09 2:14	erussell	Q43777
Styrene	BRL	µg/L	1.0	0.051	1	8260B	08/15/09 2:14	erussell	Q43777
tert-Butylbenzene	BRL	µg/L	1.0	0.074	1	8260B	08/15/09 2:14	erussell	Q43777
Tetrachloroethene	BRL	µg/L	1.0	0.12	1	8260B	08/15/09 2:14	erussell	Q43777
Toluene	2.2	µg/L	1.0	0.064	1	8260B	08/15/09 2:14	erussell	Q43777
trans-1,2-Dichloroethene	BRL	µg/L	2.0	0.066	1	8260B	08/15/09 2:14	erussell	Q43777
trans-1,3-Dichloropropene	BRL	µg/L	1.0	0.17	1	8260B	08/15/09 2:14	erussell	Q43777
Trichloroethene	BRL	µg/L	2.0	0.073	1	8260B	08/15/09 2:14	erussell	Q43777
Trichlorofluoromethane	BRL	µg/L	2.0	0.31	1	8260B	08/15/09 2:14	erussell	Q43777
Vinyl acetate	BRL	µg/L	20	1.8	1	8260B	08/15/09 2:14	erussell	Q43777
Vinyl chloride	BRL	µg/L	2.0	0.28	1	8260B	08/15/09 2:14	erussell	Q43777

Surrogate	% Recovery	Control Limits
Toluene-d8	101	75 - 121
Dibromofluoromethane	101	74 - 133
Bromofluorobenzene	102	69 - 139

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-01 (DS)  
Prism Sample ID: 253929  
COC Group: G0809050  
Time Collected: 08/03/09 10:25  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Sample Comment(s):

BRL = Below Reporting Limit

J- Estimated value between the Reporting Limit and the MDL.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a wet-weight basis

A handwritten signature in black ink, appearing to read "RL".

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SW-1  
Prism Sample ID: 253930  
COC Group: G0809050  
Time Collected: 08/03/09 10:40  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b>Volatile Organic Compounds by GC/MS</b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	20	1.7	20	8260B	08/15/09 6:35	erussell	Q43777
1,1,1-Trichloroethane	17 J	µg/L	20	1.1	20	8260B	08/15/09 6:35	erussell	Q43777
1,1,2,2-Tetrachloroethane	BRL	µg/L	20	1.4	20	8260B	08/15/09 6:35	erussell	Q43777
1,1,2-Trichloroethane	BRL	µg/L	20	1.8	20	8260B	08/15/09 6:35	erussell	Q43777
1,1-Dichloroethane	BRL	µg/L	20	1.1	20	8260B	08/15/09 6:35	erussell	Q43777
1,1-Dichloroethene	BRL	µg/L	20	0.92	20	8260B	08/15/09 6:35	erussell	Q43777
1,1-Dichloropropene	BRL	µg/L	20	1.8	20	8260B	08/15/09 6:35	erussell	Q43777
1,2,3-Trichlorobenzene	BRL	µg/L	40	4.7	20	8260B	08/15/09 6:35	erussell	Q43777
1,2,3-Trichloropropane	BRL	µg/L	20	3.0	20	8260B	08/15/09 6:35	erussell	Q43777
1,2,4-Trichlorobenzene	BRL	µg/L	20	5.5	20	8260B	08/15/09 6:35	erussell	Q43777
1,2,4-Trimethylbenzene	BRL	µg/L	20	2.8	20	8260B	08/15/09 6:35	erussell	Q43777
1,2-Dibromo-3-chloropropane	BRL	µg/L	20	7.3	20	8260B	08/15/09 6:35	erussell	Q43777
1,2-Dibromoethane (EDB)	BRL	µg/L	20	2.2	20	8260B	08/15/09 6:35	erussell	Q43777
1,2-Dichlorobenzene	BRL	µg/L	20	1.9	20	8260B	08/15/09 6:35	erussell	Q43777
1,2-Dichloroethane	BRL	µg/L	20	1.4	20	8260B	08/15/09 6:35	erussell	Q43777
1,2-Dichloropropane	BRL	µg/L	20	1.6	20	8260B	08/15/09 6:35	erussell	Q43777
1,3,5-Trimethylbenzene	BRL	µg/L	20	1.6	20	8260B	08/15/09 6:35	erussell	Q43777
1,3-Dichlorobenzene	BRL	µg/L	20	2.0	20	8260B	08/15/09 6:35	erussell	Q43777
1,3-Dichloropropane	BRL	µg/L	20	1.2	20	8260B	08/15/09 6:35	erussell	Q43777
1,4-Dichlorobenzene	BRL	µg/L	20	1.8	20	8260B	08/15/09 6:35	erussell	Q43777
2,2-Dichloropropane	BRL	µg/L	40	4.3	20	8260B	08/15/09 6:35	erussell	Q43777
2-Chloroethyl vinyl ether	BRL	µg/L	40	7.3	20	8260B	08/15/09 6:35	erussell	Q43777
2-Chlorotoluene	BRL	µg/L	20	1.8	20	8260B	08/15/09 6:35	erussell	Q43777
2-Hexanone	BRL	µg/L	100	4.0	20	8260B	08/15/09 6:35	erussell	Q43777
4-Chlorotoluene	BRL	µg/L	20	2.6	20	8260B	08/15/09 6:35	erussell	Q43777
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	100	19	20	8260B	08/15/09 6:35	erussell	Q43777
Acetone	BRL	µg/L	200	20	20	8260B	08/15/09 6:35	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SW-1  
Prism Sample ID: 253930  
COC Group: G0809050  
Time Collected: 08/03/09 10:40  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	2000	28	20	8260B	08/15/09 6:35	erussell	Q43777
Acrylonitrile	BRL	µg/L	2000	28	20	8260B	08/15/09 6:35	erussell	Q43777
Benzene	BRL	µg/L	20	0.88	20	8260B	08/15/09 6:35	erussell	Q43777
Bromobenzene	BRL	µg/L	20	2.0	20	8260B	08/15/09 6:35	erussell	Q43777
Bromochloromethane	BRL	µg/L	20	2.8	20	8260B	08/15/09 6:35	erussell	Q43777
Bromodichloromethane	BRL	µg/L	20	1.5	20	8260B	08/15/09 6:35	erussell	Q43777
Bromoform	BRL	µg/L	20	0.78	20	8260B	08/15/09 6:35	erussell	Q43777
Bromomethane	BRL	µg/L	60	5.5	20	8260B	08/15/09 6:35	erussell	Q43777
Carbon disulfide	BRL	µg/L	100	7.4	20	8260B	08/15/09 6:35	erussell	Q43777
Carbon tetrachloride	BRL	µg/L	40	2.2	20	8260B	08/15/09 6:35	erussell	Q43777
Chlorobenzene	BRL	µg/L	20	1.0	20	8260B	08/15/09 6:35	erussell	Q43777
Chlorodibromomethane	BRL	µg/L	20	1.4	20	8260B	08/15/09 6:35	erussell	Q43777
Chloroethane	BRL	µg/L	100	4.5	20	8260B	08/15/09 6:35	erussell	Q43777
Chloroform	BRL	µg/L	20	0.98	20	8260B	08/15/09 6:35	erussell	Q43777
Chloromethane	BRL	µg/L	40	6.0	20	8260B	08/15/09 6:35	erussell	Q43777
cis-1,2-Dichloroethene	330	µg/L	20	1.1	20	8260B	08/15/09 6:35	erussell	Q43777
cis-1,3-Dichloropropene	BRL	µg/L	20	1.4	20	8260B	08/15/09 6:35	erussell	Q43777
Dibromomethane	BRL	µg/L	20	4.2	20	8260B	08/15/09 6:35	erussell	Q43777
Dichlorodifluoromethane	BRL	µg/L	40	6.1	20	8260B	08/15/09 6:35	erussell	Q43777
Ethylbenzene	BRL	µg/L	20	1.7	20	8260B	08/15/09 6:35	erussell	Q43777
Hexachlorobutadiene	BRL	µg/L	40	6.1	20	8260B	08/15/09 6:35	erussell	Q43777
Isopropyl ether (IPE)	BRL	µg/L	20	1.5	20	8260B	08/15/09 6:35	erussell	Q43777
Isopropylbenzene	BRL	µg/L	20	2.1	20	8260B	08/15/09 6:35	erussell	Q43777
m,p-Xylenes	BRL	µg/L	40	2.7	20	8260B	08/15/09 6:35	erussell	Q43777
Methyl ethyl ketone (MEK)	BRL	µg/L	100	19	20	8260B	08/15/09 6:35	erussell	Q43777
Methyl t-butyl ether (MTBE)	BRL	µg/L	20	2.2	20	8260B	08/15/09 6:35	erussell	Q43777
Methylene chloride	BRL	µg/L	40	1.6	20	8260B	08/15/09 6:35	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SW-1  
Prism Sample ID: 253930  
COC Group: G0809050  
Time Collected: 08/03/09 10:40  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	20	4.8	20	8260B	08/15/09 6:35	erussell	Q43777
n-Propylbenzene	BRL	µg/L	20	1.7	20	8260B	08/15/09 6:35	erussell	Q43777
Naphthalene	BRL	µg/L	20	4.6	20	8260B	08/15/09 6:35	erussell	Q43777
o-Xylene	BRL	µg/L	20	1.2	20	8260B	08/15/09 6:35	erussell	Q43777
p-Isopropyltoluene	BRL	µg/L	20	2.8	20	8260B	08/15/09 6:35	erussell	Q43777
sec-Butylbenzene	BRL	µg/L	20	2.4	20	8260B	08/15/09 6:35	erussell	Q43777
Styrene	BRL	µg/L	20	1.0	20	8260B	08/15/09 6:35	erussell	Q43777
tert-Butylbenzene	BRL	µg/L	20	1.5	20	8260B	08/15/09 6:35	erussell	Q43777
Tetrachloroethene	BRL	µg/L	20	2.4	20	8260B	08/15/09 6:35	erussell	Q43777
Toluene	BRL	µg/L	20	1.3	20	8260B	08/15/09 6:35	erussell	Q43777
trans-1,2-Dichloroethene	BRL	µg/L	40	1.3	20	8260B	08/15/09 6:35	erussell	Q43777
trans-1,3-Dichloropropene	BRL	µg/L	20	3.3	20	8260B	08/15/09 6:35	erussell	Q43777
Trichloroethene	1800	µg/L	40	1.5	20	8260B	08/15/09 6:35	erussell	Q43777
Trichlorofluoromethane	BRL	µg/L	40	6.2	20	8260B	08/15/09 6:35	erussell	Q43777
Vinyl acetate	BRL	µg/L	400	35	20	8260B	08/15/09 6:35	erussell	Q43777
Vinyl chloride	BRL	µg/L	40	5.5	20	8260B	08/15/09 6:35	erussell	Q43777

Surrogate	% Recovery	Control Limits
Toluene-d8	98	75 - 121
Dibromofluoromethane	101	74 - 133
Bromofluorobenzene	102	69 - 139

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SW-1  
Prism Sample ID: 253930  
COC Group: G0809050  
Time Collected: 08/03/09 10:40  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Sample Comment(s):

BRL = Below Reporting Limit

J- Estimated value between the Reporting Limit and the MDL.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a wet-weight basis

A handwritten signature in black ink, appearing to read "RL".

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-02  
Prism Sample ID: 253931  
COC Group: G0809050  
Time Collected: 08/03/09 11:10  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b>Volatile Organic Compounds by GC/MS</b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	100	8.7	100	8260B	08/15/09 7:07	erussell	Q43777
1,1,1-Trichloroethane	830	µg/L	100	5.3	100	8260B	08/15/09 7:07	erussell	Q43777
1,1,2,2-Tetrachloroethane	BRL	µg/L	100	7.1	100	8260B	08/15/09 7:07	erussell	Q43777
1,1,2-Trichloroethane	BRL	µg/L	100	9.2	100	8260B	08/15/09 7:07	erussell	Q43777
1,1-Dichloroethane	BRL	µg/L	100	5.3	100	8260B	08/15/09 7:07	erussell	Q43777
1,1-Dichloroethene	120	µg/L	100	4.6	100	8260B	08/15/09 7:07	erussell	Q43777
1,1-Dichloropropene	BRL	µg/L	100	8.9	100	8260B	08/15/09 7:07	erussell	Q43777
1,2,3-Trichlorobenzene	BRL	µg/L	200	23	100	8260B	08/15/09 7:07	erussell	Q43777
1,2,3-Trichloropropane	BRL	µg/L	100	15	100	8260B	08/15/09 7:07	erussell	Q43777
1,2,4-Trichlorobenzene	BRL	µg/L	100	28	100	8260B	08/15/09 7:07	erussell	Q43777
1,2,4-Trimethylbenzene	110	µg/L	100	14	100	8260B	08/15/09 7:07	erussell	Q43777
1,2-Dibromo-3-chloropropane	BRL	µg/L	200	37	100	8260B	08/15/09 7:07	erussell	Q43777
1,2-Dibromoethane (EDB)	BRL	µg/L	100	11	100	8260B	08/15/09 7:07	erussell	Q43777
1,2-Dichlorobenzene	BRL	µg/L	100	9.4	100	8260B	08/15/09 7:07	erussell	Q43777
1,2-Dichloroethane	BRL	µg/L	100	7.2	100	8260B	08/15/09 7:07	erussell	Q43777
1,2-Dichloropropane	BRL	µg/L	100	8.1	100	8260B	08/15/09 7:07	erussell	Q43777
1,3,5-Trimethylbenzene	BRL	µg/L	100	8.1	100	8260B	08/15/09 7:07	erussell	Q43777
1,3-Dichlorobenzene	BRL	µg/L	100	10	100	8260B	08/15/09 7:07	erussell	Q43777
1,3-Dichloropropane	BRL	µg/L	100	6.2	100	8260B	08/15/09 7:07	erussell	Q43777
1,4-Dichlorobenzene	BRL	µg/L	100	9.2	100	8260B	08/15/09 7:07	erussell	Q43777
2,2-Dichloropropane	BRL	µg/L	200	22	100	8260B	08/15/09 7:07	erussell	Q43777
2-Chloroethyl vinyl ether	BRL	µg/L	200	37	100	8260B	08/15/09 7:07	erussell	Q43777
2-Chlorotoluene	BRL	µg/L	100	9.0	100	8260B	08/15/09 7:07	erussell	Q43777
2-Hexanone	BRL	µg/L	500	20	100	8260B	08/15/09 7:07	erussell	Q43777
4-Chlorotoluene	BRL	µg/L	100	13	100	8260B	08/15/09 7:07	erussell	Q43777
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	500	93	100	8260B	08/15/09 7:07	erussell	Q43777
Acetone	BRL	µg/L	1000	100	100	8260B	08/15/09 7:07	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-02  
Prism Sample ID: 253931  
COC Group: G0809050  
Time Collected: 08/03/09 11:10  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	10000	140	100	8260B	08/15/09 7:07	erussell	Q43777
Acrylonitrile	BRL	µg/L	10000	140	100	8260B	08/15/09 7:07	erussell	Q43777
Benzene	85 J	µg/L	100	4.4	100	8260B	08/15/09 7:07	erussell	Q43777
Bromobenzene	BRL	µg/L	100	9.8	100	8260B	08/15/09 7:07	erussell	Q43777
Bromoform	BRL	µg/L	100	14	100	8260B	08/15/09 7:07	erussell	Q43777
Bromochloromethane	BRL	µg/L	100	7.6	100	8260B	08/15/09 7:07	erussell	Q43777
Bromodichloromethane	BRL	µg/L	100	3.9	100	8260B	08/15/09 7:07	erussell	Q43777
Bromoform	BRL	µg/L	100	3.9	100	8260B	08/15/09 7:07	erussell	Q43777
Bromomethane	BRL	µg/L	300	27	100	8260B	08/15/09 7:07	erussell	Q43777
Carbon disulfide	BRL	µg/L	500	37	100	8260B	08/15/09 7:07	erussell	Q43777
Carbon tetrachloride	BRL	µg/L	200	11	100	8260B	08/15/09 7:07	erussell	Q43777
Chlorobenzene	BRL	µg/L	100	5.0	100	8260B	08/15/09 7:07	erussell	Q43777
Chlorodibromomethane	BRL	µg/L	100	7.0	100	8260B	08/15/09 7:07	erussell	Q43777
Chloroethane	BRL	µg/L	500	22	100	8260B	08/15/09 7:07	erussell	Q43777
Chloroform	BRL	µg/L	100	4.9	100	8260B	08/15/09 7:07	erussell	Q43777
Chloromethane	BRL	µg/L	200	30	100	8260B	08/15/09 7:07	erussell	Q43777
cis-1,2-Dichloroethene	1400	µg/L	100	5.4	100	8260B	08/15/09 7:07	erussell	Q43777
cis-1,3-Dichloropropene	BRL	µg/L	100	7.0	100	8260B	08/15/09 7:07	erussell	Q43777
Dibromomethane	BRL	µg/L	100	21	100	8260B	08/15/09 7:07	erussell	Q43777
Dichlorodifluoromethane	BRL	µg/L	200	31	100	8260B	08/15/09 7:07	erussell	Q43777
Ethylbenzene	BRL	µg/L	100	8.5	100	8260B	08/15/09 7:07	erussell	Q43777
Hexachlorobutadiene	BRL	µg/L	200	30	100	8260B	08/15/09 7:07	erussell	Q43777
Isopropyl ether (IPE)	BRL	µg/L	100	7.6	100	8260B	08/15/09 7:07	erussell	Q43777
Isopropylbenzene	BRL	µg/L	100	10	100	8260B	08/15/09 7:07	erussell	Q43777
m,p-Xylenes	160 J	µg/L	200	13	100	8260B	08/15/09 7:07	erussell	Q43777
Methyl ethyl ketone (MEK)	BRL	µg/L	500	95	100	8260B	08/15/09 7:07	erussell	Q43777
Methyl t-butyl ether (MTBE)	BRL	µg/L	100	11	100	8260B	08/15/09 7:07	erussell	Q43777
Methylene chloride	BRL	µg/L	200	8.1	100	8260B	08/15/09 7:07	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-02  
Prism Sample ID: 253931  
COC Group: G0809050  
Time Collected: 08/03/09 11:10  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	100	24	100	8260B	08/15/09 7:07	erussell	Q43777
n-Propylbenzene	BRL	µg/L	100	8.7	100	8260B	08/15/09 7:07	erussell	Q43777
Naphthalene	170	µg/L	100	23	100	8260B	08/15/09 7:07	erussell	Q43777
o-Xylene	150	µg/L	100	5.9	100	8260B	08/15/09 7:07	erussell	Q43777
p-Isopropyltoluene	BRL	µg/L	100	14	100	8260B	08/15/09 7:07	erussell	Q43777
sec-Butylbenzene	BRL	µg/L	100	12	100	8260B	08/15/09 7:07	erussell	Q43777
Styrene	BRL	µg/L	100	5.1	100	8260B	08/15/09 7:07	erussell	Q43777
tert-Butylbenzene	BRL	µg/L	100	7.4	100	8260B	08/15/09 7:07	erussell	Q43777
Tetrachloroethene	BRL	µg/L	100	12	100	8260B	08/15/09 7:07	erussell	Q43777
Toluene	BRL	µg/L	100	6.4	100	8260B	08/15/09 7:07	erussell	Q43777
trans-1,2-Dichloroethene	BRL	µg/L	200	6.6	100	8260B	08/15/09 7:07	erussell	Q43777
trans-1,3-Dichloropropene	BRL	µg/L	100	17	100	8260B	08/15/09 7:07	erussell	Q43777
Trichloroethene	13000	µg/L	2000	73	1000	8260B	08/15/09 7:39	erussell	Q43777
Trichlorofluoromethane	BRL	µg/L	200	31	100	8260B	08/15/09 7:07	erussell	Q43777
Vinyl acetate	BRL	µg/L	2000	180	100	8260B	08/15/09 7:07	erussell	Q43777
Vinyl chloride	BRL	µg/L	200	28	100	8260B	08/15/09 7:07	erussell	Q43777

Surrogate	% Recovery	Control Limits
Toluene-d8	100	75 - 121
Dibromofluoromethane	102	74 - 133
Bromofluorobenzene	104	69 - 139

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-02  
Prism Sample ID: 253931  
COC Group: G0809050  
Time Collected: 08/03/09 11:10  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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### Sample Comment(s):

BRL = Below Reporting Limit

J- Estimated value between the Reporting Limit and the MDL.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a wet-weight basis

A handwritten signature in black ink, appearing to read "RL".

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-03  
Prism Sample ID: 253932  
COC Group: G0809050  
Time Collected: 08/03/09 11:35  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b>Volatile Organic Compounds by GC/MS</b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	40	3.5	40	8260B	08/15/09 8:12	erussell	Q43777
1,1,1-Trichloroethane	130	µg/L	40	2.1	40	8260B	08/15/09 8:12	erussell	Q43777
1,1,2,2-Tetrachloroethane	BRL	µg/L	40	2.8	40	8260B	08/15/09 8:12	erussell	Q43777
1,1,2-Trichloroethane	BRL	µg/L	40	3.7	40	8260B	08/15/09 8:12	erussell	Q43777
1,1-Dichloroethane	BRL	µg/L	40	2.1	40	8260B	08/15/09 8:12	erussell	Q43777
1,1-Dichloroethene	39 J	µg/L	40	1.8	40	8260B	08/15/09 8:12	erussell	Q43777
1,1-Dichloropropene	BRL	µg/L	40	3.6	40	8260B	08/15/09 8:12	erussell	Q43777
1,2,3-Trichlorobenzene	BRL	µg/L	80	9.4	40	8260B	08/15/09 8:12	erussell	Q43777
1,2,3-Trichloropropane	BRL	µg/L	40	5.9	40	8260B	08/15/09 8:12	erussell	Q43777
1,2,4-Trichlorobenzene	BRL	µg/L	40	11	40	8260B	08/15/09 8:12	erussell	Q43777
1,2,4-Trimethylbenzene	BRL	µg/L	40	5.6	40	8260B	08/15/09 8:12	erussell	Q43777
1,2-Dibromo-3-chloropropane	BRL	µg/L	2.0	15	40	8260B	08/15/09 8:12	erussell	Q43777
1,2-Dibromoethane (EDB)	BRL	µg/L	40	4.4	40	8260B	08/15/09 8:12	erussell	Q43777
1,2-Dichlorobenzene	BRL	µg/L	40	3.8	40	8260B	08/15/09 8:12	erussell	Q43777
1,2-Dichloroethane	BRL	µg/L	40	2.9	40	8260B	08/15/09 8:12	erussell	Q43777
1,2-Dichloropropane	BRL	µg/L	40	3.2	40	8260B	08/15/09 8:12	erussell	Q43777
1,3,5-Trimethylbenzene	BRL	µg/L	40	3.2	40	8260B	08/15/09 8:12	erussell	Q43777
1,3-Dichlorobenzene	BRL	µg/L	40	4.0	40	8260B	08/15/09 8:12	erussell	Q43777
1,3-Dichloropropane	BRL	µg/L	40	2.5	40	8260B	08/15/09 8:12	erussell	Q43777
1,4-Dichlorobenzene	BRL	µg/L	40	3.7	40	8260B	08/15/09 8:12	erussell	Q43777
2,2-Dichloropropane	BRL	µg/L	80	8.6	40	8260B	08/15/09 8:12	erussell	Q43777
2-Chloroethyl vinyl ether	BRL	µg/L	80	15	40	8260B	08/15/09 8:12	erussell	Q43777
2-Chlorotoluene	BRL	µg/L	40	3.6	40	8260B	08/15/09 8:12	erussell	Q43777
2-Hexanone	BRL	µg/L	200	8.1	40	8260B	08/15/09 8:12	erussell	Q43777
4-Chlorotoluene	BRL	µg/L	40	5.1	40	8260B	08/15/09 8:12	erussell	Q43777
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	200	37	40	8260B	08/15/09 8:12	erussell	Q43777
Acetone	BRL	µg/L	400	40	40	8260B	08/15/09 8:12	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

Full Service Analytical & Environmental Solutions

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-03  
Prism Sample ID: 253932  
COC Group: G0809050  
Time Collected: 08/03/09 11:35  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	4000	57	40	8260B	08/15/09 8:12	erussell	Q43777
Acrylonitrile	BRL	µg/L	4000	55	40	8260B	08/15/09 8:12	erussell	Q43777
Benzene	BRL	µg/L	40	1.8	40	8260B	08/15/09 8:12	erussell	Q43777
Bromobenzene	BRL	µg/L	40	3.9	40	8260B	08/15/09 8:12	erussell	Q43777
Bromochloromethane	BRL	µg/L	40	5.6	40	8260B	08/15/09 8:12	erussell	Q43777
Bromodichloromethane	BRL	µg/L	40	3.0	40	8260B	08/15/09 8:12	erussell	Q43777
Bromoform	BRL	µg/L	40	1.6	40	8260B	08/15/09 8:12	erussell	Q43777
Bromomethane	BRL	µg/L	120	11	40	8260B	08/15/09 8:12	erussell	Q43777
Carbon disulfide	BRL	µg/L	200	15	40	8260B	08/15/09 8:12	erussell	Q43777
Carbon tetrachloride	BRL	µg/L	80	4.3	40	8260B	08/15/09 8:12	erussell	Q43777
Chlorobenzene	BRL	µg/L	40	2.0	40	8260B	08/15/09 8:12	erussell	Q43777
Chlorodibromomethane	BRL	µg/L	40	2.8	40	8260B	08/15/09 8:12	erussell	Q43777
Chloroethane	BRL	µg/L	200	8.9	40	8260B	08/15/09 8:12	erussell	Q43777
Chloroform	BRL	µg/L	40	2.0	40	8260B	08/15/09 8:12	erussell	Q43777
Chloromethane	BRL	µg/L	80	12	40	8260B	08/15/09 8:12	erussell	Q43777
cis-1,2-Dichloroethene	BRL	µg/L	40	2.2	40	8260B	08/15/09 8:12	erussell	Q43777
cis-1,3-Dichloropropene	BRL	µg/L	40	2.8	40	8260B	08/15/09 8:12	erussell	Q43777
Dibromomethane	BRL	µg/L	40	8.4	40	8260B	08/15/09 8:12	erussell	Q43777
Dichlorodifluoromethane	BRL	µg/L	80	12	40	8260B	08/15/09 8:12	erussell	Q43777
Ethylbenzene	BRL	µg/L	40	3.4	40	8260B	08/15/09 8:12	erussell	Q43777
Hexachlorobutadiene	BRL	µg/L	80	12	40	8260B	08/15/09 8:12	erussell	Q43777
Isopropyl ether (IPE)	BRL	µg/L	40	3.0	40	8260B	08/15/09 8:12	erussell	Q43777
Isopropylbenzene	BRL	µg/L	40	4.2	40	8260B	08/15/09 8:12	erussell	Q43777
m,p-Xylenes	BRL	µg/L	80	5.3	40	8260B	08/15/09 8:12	erussell	Q43777
Methyl ethyl ketone (MEK)	BRL	µg/L	200	38	40	8260B	08/15/09 8:12	erussell	Q43777
Methyl t-butyl ether (MTBE)	BRL	µg/L	40	4.4	40	8260B	08/15/09 8:12	erussell	Q43777
Methylene chloride	BRL	µg/L	80	3.2	40	8260B	08/15/09 8:12	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-03  
Prism Sample ID: 253932  
COC Group: G0809050  
Time Collected: 08/03/09 11:35  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	40	9.7	40	8260B	08/15/09 8:12	erussell	Q43777
n-Propylbenzene	BRL	µg/L	40	3.5	40	8260B	08/15/09 8:12	erussell	Q43777
Naphthalene	BRL	µg/L	40	9.1	40	8260B	08/15/09 8:12	erussell	Q43777
o-Xylene	BRL	µg/L	40	2.4	40	8260B	08/15/09 8:12	erussell	Q43777
p-Isopropyltoluene	BRL	µg/L	40	5.6	40	8260B	08/15/09 8:12	erussell	Q43777
sec-Butylbenzene	BRL	µg/L	40	4.8	40	8260B	08/15/09 8:12	erussell	Q43777
Styrene	BRL	µg/L	40	2.0	40	8260B	08/15/09 8:12	erussell	Q43777
tert-Butylbenzene	BRL	µg/L	40	3.0	40	8260B	08/15/09 8:12	erussell	Q43777
Tetrachloroethene	BRL	µg/L	40	4.8	40	8260B	08/15/09 8:12	erussell	Q43777
Toluene	BRL	µg/L	40	2.6	40	8260B	08/15/09 8:12	erussell	Q43777
trans-1,2-Dichloroethene	BRL	µg/L	80	2.6	40	8260B	08/15/09 8:12	erussell	Q43777
trans-1,3-Dichloropropene	BRL	µg/L	40	6.6	40	8260B	08/15/09 8:12	erussell	Q43777
Trichloroethene	20000	µg/L	800	29	400	8260B	08/15/09 8:44	erussell	Q43777
Trichlorofluoromethane	BRL	µg/L	80	12	40	8260B	08/15/09 8:12	erussell	Q43777
Vinyl acetate	BRL	µg/L	800	70	40	8260B	08/15/09 8:12	erussell	Q43777
Vinyl chloride	BRL	µg/L	80	11	40	8260B	08/15/09 8:12	erussell	Q43777

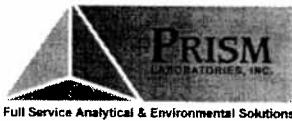
Surrogate	% Recovery	Control Limits
Toluene-d8	102	75 - 121
Dibromofluoromethane	104	74 - 133
Bromofluorobenzene	106	69 - 139

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Full Service Analytical & Environmental Solutions

NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-03  
Prism Sample ID: 253932  
COC Group: G0809050  
Time Collected: 08/03/09 11:35  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

### Sample Comment(s):

BRL = Below Reporting Limit

J- Estimated value between the Reporting Limit and the MDL.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a wet-weight basis

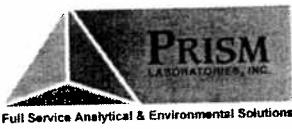
Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

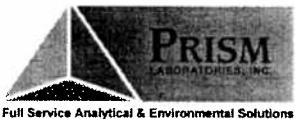
Client Sample ID: SPRING-04  
Prism Sample ID: 253933  
COC Group: G0809050  
Time Collected: 08/03/09 12:00  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b>Volatile Organic Compounds by GC/MS</b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	400	35	400	8260B	08/15/09 9:17	erussell	Q43777
1,1,1-Trichloroethane	BRL	µg/L	400	21	400	8260B	08/15/09 9:17	erussell	Q43777
1,1,2,2-Tetrachloroethane	BRL	µg/L	400	28	400	8260B	08/15/09 9:17	erussell	Q43777
1,1,2-Trichloroethane	BRL	µg/L	400	37	400	8260B	08/15/09 9:17	erussell	Q43777
1,1-Dichloroethane	BRL	µg/L	400	21	400	8260B	08/15/09 9:17	erussell	Q43777
1,1-Dichloroethene	BRL	µg/L	400	18	400	8260B	08/15/09 9:17	erussell	Q43777
1,1-Dichloropropene	BRL	µg/L	400	36	400	8260B	08/15/09 9:17	erussell	Q43777
1,2,3-Trichlorobenzene	BRL	µg/L	800	94	400	8260B	08/15/09 9:17	erussell	Q43777
1,2,3-Trichloropropane	BRL	µg/L	400	59	400	8260B	08/15/09 9:17	erussell	Q43777
1,2,4-Trichlorobenzene	BRL	µg/L	400	110	400	8260B	08/15/09 9:17	erussell	Q43777
1,2,4-Trimethylbenzene	BRL	µg/L	400	56	400	8260B	08/15/09 9:17	erussell	Q43777
1,2-Dibromo-3-chloropropane	BRL	µg/L	800	150	400	8260B	08/15/09 9:17	erussell	Q43777
1,2-Dibromoethane (EDB)	BRL	µg/L	400	44	400	8260B	08/15/09 9:17	erussell	Q43777
1,2-Dichlorobenzene	BRL	µg/L	400	38	400	8260B	08/15/09 9:17	erussell	Q43777
1,2-Dichloroethane	BRL	µg/L	400	29	400	8260B	08/15/09 9:17	erussell	Q43777
1,2-Dichloropropane	BRL	µg/L	400	32	400	8260B	08/15/09 9:17	erussell	Q43777
1,3,5-Trimethylbenzene	BRL	µg/L	400	32	400	8260B	08/15/09 9:17	erussell	Q43777
1,3-Dichlorobenzene	BRL	µg/L	400	40	400	8260B	08/15/09 9:17	erussell	Q43777
1,3-Dichloropropane	BRL	µg/L	400	25	400	8260B	08/15/09 9:17	erussell	Q43777
1,4-Dichlorobenzene	BRL	µg/L	400	37	400	8260B	08/15/09 9:17	erussell	Q43777
2,2-Dichloropropane	BRL	µg/L	800	86	400	8260B	08/15/09 9:17	erussell	Q43777
2-Chloroethyl vinyl ether	BRL	µg/L	800	150	400	8260B	08/15/09 9:17	erussell	Q43777
2-Chlorotoluene	BRL	µg/L	400	36	400	8260B	08/15/09 9:17	erussell	Q43777
2-Hexanone	BRL	µg/L	2000	81	400	8260B	08/15/09 9:17	erussell	Q43777
4-Chlorotoluene	BRL	µg/L	400	51	400	8260B	08/15/09 9:17	erussell	Q43777
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	2000	370	400	8260B	08/15/09 9:17	erussell	Q43777
Acetone	BRL	µg/L	4000	400	400	8260B	08/15/09 9:17	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-04  
Prism Sample ID: 253933  
COC Group: G0809050  
Time Collected: 08/03/09 12:00  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	40000	570	400	8260B	08/15/09 9:17	erussell	Q43777
Acrylonitrile	BRL	µg/L	40000	550	400	8260B	08/15/09 9:17	erussell	Q43777
Benzene	BRL	µg/L	400	18	400	8260B	08/15/09 9:17	erussell	Q43777
Bromobenzene	BRL	µg/L	400	39	400	8260B	08/15/09 9:17	erussell	Q43777
Bromo(chloromethane)	BRL	µg/L	400	56	400	8260B	08/15/09 9:17	erussell	Q43777
Bromodichloromethane	BRL	µg/L	400	30	400	8260B	08/15/09 9:17	erussell	Q43777
Bromoform	BRL	µg/L	400	16	400	8260B	08/15/09 9:17	erussell	Q43777
Bromomethane	BRL	µg/L	1200	110	400	8260B	08/15/09 9:17	erussell	Q43777
Carbon disulfide	BRL	µg/L	2000	150	400	8260B	08/15/09 9:17	erussell	Q43777
Carbon tetrachloride	BRL	µg/L	800	43	400	8260B	08/15/09 9:17	erussell	Q43777
Chlorobenzene	BRL	µg/L	400	20	400	8260B	08/15/09 9:17	erussell	Q43777
Chlorodibromomethane	BRL	µg/L	400	28	400	8260B	08/15/09 9:17	erussell	Q43777
Chloroethane	BRL	µg/L	2000	89	400	8260B	08/15/09 9:17	erussell	Q43777
Chloroform	BRL	µg/L	400	20	400	8260B	08/15/09 9:17	erussell	Q43777
Chloromethane	BRL	µg/L	800	120	400	8260B	08/15/09 9:17	erussell	Q43777
cis-1,2-Dichloroethene	1000	µg/L	400	22	400	8260B	08/15/09 9:17	erussell	Q43777
cis-1,3-Dichloropropene	BRL	µg/L	400	28	400	8260B	08/15/09 9:17	erussell	Q43777
Dibromomethane	BRL	µg/L	400	84	400	8260B	08/15/09 9:17	erussell	Q43777
Dichlorodifluoromethane	BRL	µg/L	800	120	400	8260B	08/15/09 9:17	erussell	Q43777
Ethylbenzene	BRL	µg/L	400	34	400	8260B	08/15/09 9:17	erussell	Q43777
Hexachlorobutadiene	BRL	µg/L	800	120	400	8260B	08/15/09 9:17	erussell	Q43777
Isopropyl ether (IPE)	BRL	µg/L	400	30	400	8260B	08/15/09 9:17	erussell	Q43777
Isopropylbenzene	BRL	µg/L	400	42	400	8260B	08/15/09 9:17	erussell	Q43777
m,p-Xylenes	BRL	µg/L	800	53	400	8260B	08/15/09 9:17	erussell	Q43777
Methyl ethyl ketone (MEK)	BRL	µg/L	2000	380	400	8260B	08/15/09 9:17	erussell	Q43777
Methyl t-butyl ether (MTBE)	BRL	µg/L	400	44	400	8260B	08/15/09 9:17	erussell	Q43777
Methylene chloride	BRL	µg/L	800	32	400	8260B	08/15/09 9:17	erussell	Q43777

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

# Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-04  
Prism Sample ID: 253933  
COC Group: G0809050  
Time Collected: 08/03/09 12:00  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	400	97	400	8260B	08/15/09 9:17	erussell	Q43777
n-Propylbenzene	BRL	µg/L	400	35	400	8260B	08/15/09 9:17	erussell	Q43777
Naphthalene	BRL	µg/L	400	91	400	8260B	08/15/09 9:17	erussell	Q43777
o-Xylene	BRL	µg/L	400	24	400	8260B	08/15/09 9:17	erussell	Q43777
p-Isopropyltoluene	BRL	µg/L	400	56	400	8260B	08/15/09 9:17	erussell	Q43777
sec-Butylbenzene	BRL	µg/L	400	48	400	8260B	08/15/09 9:17	erussell	Q43777
Styrene	BRL	µg/L	400	20	400	8260B	08/15/09 9:17	erussell	Q43777
tert-Butylbenzene	BRL	µg/L	400	30	400	8260B	08/15/09 9:17	erussell	Q43777
Tetrachloroethene	BRL	µg/L	400	48	400	8260B	08/15/09 9:17	erussell	Q43777
Toluene	BRL	µg/L	400	26	400	8260B	08/15/09 9:17	erussell	Q43777
trans-1,2-Dichloroethene	BRL	µg/L	800	26	400	8260B	08/15/09 9:17	erussell	Q43777
trans-1,3-Dichloropropene	BRL	µg/L	400	66	400	8260B	08/15/09 9:17	erussell	Q43777
Trichloroethene	24000	µg/L	800	29	400	8260B	08/15/09 9:17	erussell	Q43777
Trichlorofluoromethane	BRL	µg/L	800	120	400	8260B	08/15/09 9:17	erussell	Q43777
Vinyl acetate	BRL	µg/L	8000	700	400	8260B	08/15/09 9:17	erussell	Q43777
Vinyl chloride	BRL	µg/L	800	110	400	8260B	08/15/09 9:17	erussell	Q43777

Surrogate	% Recovery	Control Limits
Toluene-d8	103	75 - 121
Dibromofluoromethane	103	74 - 133
Bromofluorobenzene	106	69 - 139

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Full Service Analytical & Environmental Solutions

NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Laboratory Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap  
Sample Matrix: Water

Client Sample ID: SPRING-04  
Prism Sample ID: 253933  
COC Group: G0809050  
Time Collected: 08/03/09 12:00  
Time Submitted: 08/04/09 0:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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### Sample Comment(s):

BRL = Below Reporting Limit

J- Estimated value between the Reporting Limit and the MDL.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a wet-weight basis

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402  
SC Certification No. 99012  
NC Drinking Water Cert. No. 37735

## Level II QC Report

08/22/09

Full Service Analytical & Environmental Solutions

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap

COC Group Number: G0809050  
Date/Time Submitted: 08/04/09 0:00

### Volatile Organic Compounds by GC/MS, method 8260B

Method Blank	Result	RL	Control Limit	Units	QC Batch ID
1,1,1,2-Tetrachloroethane	ND	1	<0.5	µg/L	Q43777
1,1,1-Trichloroethane	ND	1	<0.5	µg/L	Q43777
1,1,2,2-Tetrachloroethane	ND	1	<0.5	µg/L	Q43777
1,1,2-Trichloroethane	ND	1	<0.5	µg/L	Q43777
1,1-Dichloroethane	ND	1	<0.5	µg/L	Q43777
1,1-Dichloroethene	ND	1	<0.5	µg/L	Q43777
1,1-Dichloropropene	ND	1	<0.5	µg/L	Q43777
1,2,3-Trichlorobenzene	ND	2	<1	µg/L	Q43777
1,2,3-Trichloropropane	ND	1	<0.5	µg/L	Q43777
1,2,4-Trichlorobenzene	ND	1	<0.5	µg/L	Q43777
1,2,4-Trimethylbenzene	ND	1	<0.5	µg/L	Q43777
1,2-Dibromoethane (EDB)	ND	1	<0.5	µg/L	Q43777
1,2-Dichlorobenzene	ND	1	<0.5	µg/L	Q43777
1,2-Dichloroethane	ND	1	<0.5	µg/L	Q43777
1,2-Dichloropropane	ND	1	<0.5	µg/L	Q43777
1,3,5-Trimethylbenzene	ND	1	<0.5	µg/L	Q43777
1,3-Dichlorobenzene	ND	1	<0.5	µg/L	Q43777
1,3-Dichloropropane	ND	1	<0.5	µg/L	Q43777
1,4-Dichlorobenzene	ND	1	<0.5	µg/L	Q43777
1,4-Dichlorobutane	ND	5	<2.5	µg/L	Q43777
2,2-Dichloropropane	ND	2	<1	µg/L	Q43777
2-Chloroethyl vinyl ether	ND	2	<1	µg/L	Q43777
2-Chlorotoluene	ND	1	<0.5	µg/L	Q43777
2-Hexanone	ND	5	<2.5	µg/L	Q43777
4-Chlorotoluene	ND	1	<0.5	µg/L	Q43777
4-Methyl-2-pentanone (MIBK)	ND	5	<2.5	µg/L	Q43777
Acetone	ND	10	<5	µg/L	Q43777
Acrolein	ND	100	<50	µg/L	Q43777
Acrylonitrile	ND	100	<50	µg/L	Q43777
Benzene	ND	1	<0.5	µg/L	Q43777
Bromobenzene	ND	1	<0.5	µg/L	Q43777
Bromochloromethane	ND	1	<0.5	µg/L	Q43777
Bromodichloromethane	ND	1	<0.5	µg/L	Q43777
Bromoform	ND	1	<0.5	µg/L	Q43777

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## Level II QC Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap

COC Group Number: G0809050

Date/Time Submitted: 08/04/09 0:00

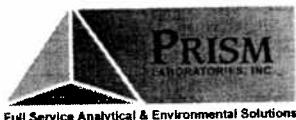
Method Blank	Result	RL	Control Limit	Units	QC Batch ID
Bromomethane	ND	3	<1.5	µg/L	Q43777
Carbon disulfide	ND	5	<2.5	µg/L	Q43777
Carbon tetrachloride	ND	2	<1	µg/L	Q43777
Chlorobenzene	ND	1	<0.5	µg/L	Q43777
Chlorodibromomethane	ND	1	<0.5	µg/L	Q43777
Chloroethane	ND	5	<2.5	µg/L	Q43777
Chloroform	ND	1	<0.5	µg/L	Q43777
Chloromethane	ND	2	<1	µg/L	Q43777
cis-1,2-Dichloroethene	ND	1	<0.5	µg/L	Q43777
cis-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q43777
Dibromomethane	ND	1	<0.5	µg/L	Q43777
Dichlorodifluoromethane	ND	2	<1	µg/L	Q43777
Ethylbenzene	ND	1	<0.5	µg/L	Q43777
Hexachlorobutadiene	ND	2	<1	µg/L	Q43777
Isopropyl ether (IPE)	ND	1	<0.5	µg/L	Q43777
Isopropylbenzene	ND	1	<0.5	µg/L	Q43777
m,p-Xylenes	ND	2	<1	µg/L	Q43777
Methyl ethyl ketone (MEK)	ND	5	<2.5	µg/L	Q43777
Methyl iodide	ND	5	<2.5	µg/L	Q43777
Methyl t-butyl ether (MTBE)	ND	1	<0.5	µg/L	Q43777
Methylene chloride	ND	2	<1	µg/L	Q43777
n-Butylbenzene	ND	1	<0.5	µg/L	Q43777
n-Propylbenzene	ND	1	<0.5	µg/L	Q43777
Naphthalene	ND	1	<0.5	µg/L	Q43777
o-Xylene	ND	1	<0.5	µg/L	Q43777
p-Isopropyltoluene	ND	1	<0.5	µg/L	Q43777
sec-Butylbenzene	ND	1	<0.5	µg/L	Q43777
Styrene	ND	1	<0.5	µg/L	Q43777
tert-Butylbenzene	ND	1	<0.5	µg/L	Q43777
Tetrachloroethene	ND	1	<0.5	µg/L	Q43777
Toluene	ND	1	<0.5	µg/L	Q43777
trans-1,2-Dichloroethene	ND	2	<1	µg/L	Q43777
trans-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q43777
Trichloroethene	ND	2	<1	µg/L	Q43777
Trichlorofluoromethane	ND	2	<1	µg/L	Q43777
Vinyl acetate	ND	20	<10	µg/L	Q43777

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NC Certification No. 402  
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## Level II QC Report

08/22/09

MACTEC Eng. & Consulting, Inc  
Attn: Susan Kelly  
1308 Patton Avenue  
Asheville, NC 28806

Project ID: Mills Gap

COC Group Number: G0809050  
Date/Time Submitted: 08/04/09 0:00

Method Blank					QC Batch ID
	Result	RL	Control Limit	Units	
Vinyl chloride	ND	2	<1	µg/L	Q43777
<b>Laboratory Control Sample</b>					
	Result	Spike Amount	Units	Recovery %	Recovery Ranges %
1,1-Dichloroethene	53.64	50	µg/L	107	62-141
Benzene	52.42	50	µg/L	105	70-141
Chlorobenzene	45.94	50	µg/L	92	88-120
Toluene	48.46	50	µg/L	97	78-130
Trichloroethene	58.94	50	µg/L	118	78-124
<b>Matrix Spike</b>					
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Ranges %
254048 1,1-Dichloroethene	598.8	500	µg/L	118	54-140
Benzene	567.2	500	µg/L	113	62-129
Chlorobenzene	483.9	500	µg/L	97	64-127
Toluene	517.6	500	µg/L	104	60-131
Trichloroethene	557.1	500	µg/L	111	52-128
<b>Matrix Spike Duplicate</b>					
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Ranges %
254048 1,1-Dichloroethene	557.6	500	µg/L	110	54-140
Benzene	535.2	500	µg/L	107	62-129
Chlorobenzene	469.7	500	µg/L	94	64-127
Toluene	491	500	µg/L	98	60-131
Trichloroethene	528.6	500	µg/L	106	52-128

#-See Case Narrative



