



engineering and constructing a better tomorrow

October 29, 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 65  
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 September 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". The signature is fluid and cursive, with a long horizontal stroke at the end.

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: September 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 September 30, 2009, MACTEC submitted the August 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 August 21, 2009. An estimated 136 pounds of volatile organic compounds (VOCs) were removed by the SVE system in August 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 September 22, 2009. The SVE system operated for approximately 272 hours during the month of September 2009. An estimated 70 pounds of VOCs were removed by the SVE system in September 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 G132-2102, dated October 6, 2009 (sample collected September 22, 2009).
- An estimated 6,379 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.
  - An evaluation of pilot study data collected to date was performed and it was determined that additional time was necessary to configure the operation of the system to further evaluate the effectiveness of the removal technology. As discussed in a telephone conversation between CTS and EPA representatives, the pilot study period will be extended and the additional data obtained will be presented in a final report at the end of the study period.
- Analytical data from the ozone pilot study received during this period includes:
  - Prism Laboratories, Inc. Report G0909093, dated September 10, 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.





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

Report Number: G132-2102

Client Project: Mills Gap Road

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*  
Project Manager  
Barbara Hager

*October 6, 2009*  
Date

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

% solids = 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: MG47A-9/22/09  
Client Project ID: Mills Gap Road  
Lab Sample ID: G132-2102-1A  
Lab Project ID: G132-2102

Analyzed By: EAW  
Date Collected: 9/22/2009 12:29  
Date Received: 9/23/2009  
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	5	5	10/6/2009
Bromochloromethane	BQL	5	5	10/6/2009
Bromodichloromethane	BQL	5	5	10/6/2009
Bromoform	BQL	5	5	10/6/2009
Carbon tetrachloride	BQL	5	5	10/6/2009
Chlorobenzene	BQL	5	5	10/6/2009
Chloroform	BQL	5	5	10/6/2009
Dibromochloromethane	BQL	5	5	10/6/2009
1,2-Dibromoethane (EDB)	BQL	5	5	10/6/2009
1,2-Dichlorobenzene	BQL	5	5	10/6/2009
1,3-Dichlorobenzene	BQL	5	5	10/6/2009
1,4-Dichlorobenzene	BQL	5	5	10/6/2009
1,1-Dichloroethane	BQL	5	5	10/6/2009
1,1-Dichloroethene	BQL	5	5	10/6/2009
1,2-Dichloroethane	BQL	5	5	10/6/2009
cis-1,2-Dichloroethene	BQL	5	5	10/6/2009
trans-1,2-dichloroethene	BQL	5	5	10/6/2009
1,2-Dichloropropane	BQL	5	5	10/6/2009
cis-1,3-Dichloropropene	BQL	5	5	10/6/2009
trans-1,3-Dichloropropene	BQL	5	5	10/6/2009
Diisopropyl ether	BQL	5	5	10/6/2009
Ethylbenzene	BQL	5	5	10/6/2009
Methyl-tert-butyl ether	BQL	5	5	10/6/2009
Styrene	BQL	5	5	10/6/2009
1,1,2,2-Tetrachloroethane	BQL	5	5	10/6/2009
Tetrachloroethene	BQL	5	5	10/6/2009
Toluene	BQL	5	5	10/6/2009
Trichloroethene	163	5	5	10/6/2009
1,1,1-Trichloroethane	12.0	5	5	10/6/2009
1,1,2-Trichloroethane	BQL	5	5	10/6/2009
m-,p-Xylene	BQL	10	5	10/6/2009
o-Xylene	BQL	5	5	10/6/2009

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: 

SGS North America, Inc.

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

Client Sample ID: MG47B-9/22/09  
Client Project ID: Mills Gap Road  
Lab Sample ID: G132-2102-2A  
Lab Project ID: G132-2102

Analyzed By: EAW  
Date Collected: 9/22/2009 12:29  
Date Received: 9/23/2009  
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	0.4	1	10/5/2009
Bromochloromethane	BQL	0.4	1	10/5/2009
Bromodichloromethane	BQL	0.4	1	10/5/2009
Bromoform	BQL	0.4	1	10/5/2009
Carbon tetrachloride	BQL	0.4	1	10/5/2009
Chlorobenzene	BQL	0.4	1	10/5/2009
Chloroform	BQL	0.4	1	10/5/2009
Dibromochloromethane	BQL	0.4	1	10/5/2009
1,2-Dibromoethane (EDB)	BQL	0.4	1	10/5/2009
1,2-Dichlorobenzene	BQL	0.4	1	10/5/2009
1,3-Dichlorobenzene	BQL	0.4	1	10/5/2009
1,4-Dichlorobenzene	BQL	0.4	1	10/5/2009
1,1-Dichloroethane	BQL	0.4	1	10/5/2009
1,1-Dichloroethene	BQL	0.4	1	10/5/2009
1,2-Dichloroethane	BQL	0.4	1	10/5/2009
cis-1,2-Dichloroethene	BQL	0.4	1	10/5/2009
trans-1,2-dichloroethene	BQL	0.4	1	10/5/2009
1,2-Dichloropropane	BQL	0.4	1	10/5/2009
cis-1,3-Dichloropropene	BQL	0.4	1	10/5/2009
trans-1,3-Dichloropropene	BQL	0.4	1	10/5/2009
Diisopropyl ether	BQL	0.4	1	10/5/2009
Ethylbenzene	BQL	0.4	1	10/5/2009
Methyl-tert-butyl ether	BQL	0.4	1	10/5/2009
Styrene	BQL	0.4	1	10/5/2009
1,1,2,2-Tetrachloroethane	BQL	0.4	1	10/5/2009
Tetrachloroethene	BQL	0.4	1	10/5/2009
Toluene	BQL	0.4	1	10/5/2009
Trichloroethene	BQL	0.4	1	10/5/2009
1,1,1-Trichloroethane	BQL	0.4	1	10/5/2009
1,1,2-Trichloroethane	BQL	0.4	1	10/5/2009
m-,p-Xylene	BQL	0.8	1	10/5/2009
o-Xylene	BQL	0.4	1	10/5/2009

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: 

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

Client Sample ID: MG-47A,B 9/22/2009 (DRO)  
Client Project ID: Mills Gap Road  
Lab Sample ID: G132-2102-3,4  
Lab Project ID: G132-2102

Analyzed By: BWS  
Date Collected: 9/22/2009  
Date Received: 9/23/2009  
Matrix: Air

Analyte	Result mg/m <sup>3</sup>	RL mg/m <sup>3</sup>	Dilution Factor	Date Analyzed
Front Half: Diesel Range Organics	21.5	10	1	09/30/09
Back Half: Diesel Range Organics	BQL	4	1	09/30/09

Comments:

Flags:



**CHAIN OF CUSTODY RECORD**  
**SGS Environmental Services Inc.**

Locations Nationwide  
 • Alaska  
 • Ohio  
 • New Jersey  
 • West Virginia  
 • Hawaii  
 • Maryland  
 • North Carolina  
 www.us.sgs.com

093336

1 CLIENT: MACTEC Engineering & Consulting  
 CONTACT: Susan Kelly PHONE NO: (828) 252-8130  
 PROJECT: Mills Crap Road SITE/PWSID#:             
 REPORTS TO: Susan Kelly E-MAIL: sekelly@machec.com  
1308 Patton Ave  
Asheville, NC 28806 FAX NO: (828) 257-9690  
 INVOICE TO: QUOTE #  
 P.O. NUMBER 200911829

SGS Reference: 0132-2102 PAGE 1 OF 1

No	CONTAINERS	SAMPLE TYPE	Preservatives Used Analysis Required	REMARKS
1	5	air	3 VOC (B260) VPC (B015)	
1	5	air		
1	5	air		
1	5	air		

SGS North America, Inc.

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX
	MG 47A - 9/22/09	9-22-09	1229	air
	MG 47B - 9/22/09	9-22-09	1229	air
	MG 47A - 9/22/09	9-22-09	1245	air
	MG 47B - 9/22/09	9-22-09	1245	air

5

Collected/Relinquished By: (1)	Date	Time	Received By:	Date	Time
<u>[Signature]</u>	9/22/09	1700	<u>[Signature]</u>	9/23/09	1000
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

4

Shipping Carrier: FEDEX Samples Received Cold? (Circle) YES (NO)

Shipping Ticket No: 809617385500 Temperature (C): 23.14

Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT (BROKEN) (ABSENT)

Special Instructions: Assume 10 liters of Air.  
'A' = initial tube 'B' = breakthrough tube

Requested Turnaround Time:            Date Needed           

RUSH  STD



**PRISM**  
LABORATORIES, INC.

## Case Narrative

**Date:** 09/10/09  
**Company:** MACTEC Eng. & Consulting, Inc  
**Contact:** Susan Kelly  
**Address:** 1308 Patton Avenue  
 Asheville, NC 28806

**Client Project ID:** Mills Gap  
**Prism COC Group No:** G0909093  
**Collection Date(s):** 09/02/09  
**Lab Submittal Date(s):** 09/03/09

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:** *Steven H. Guptill*

**Signature:** *Steven H. Guptill*

**Review Date:** 09/10/09

**Approval Date:** 09/10/09

**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.



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

# Laboratory Report

09/10/09

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: 256919  
 COC Group: G0909093  
 Time Collected: 09/02/09 8:55  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b><u>Volatile Organic Compounds by GC/MS</u></b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	1.0	0.087	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1,1-Trichloroethane	BRL	µg/L	1.0	0.053	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1,2,2-Tetrachloroethane	BRL	µg/L	1.0	0.071	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1,2-Trichloroethane	BRL	µg/L	1.0	0.092	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1-Dichloroethane	BRL	µg/L	1.0	0.053	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1-Dichloroethene	BRL	µg/L	1.0	0.046	1	8260B	09/09/09 3:13	Iwity	Q44321
1,1-Dichloropropene	BRL	µg/L	1.0	0.089	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2,3-Trichlorobenzene	BRL	µg/L	2.0	0.23	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2,3-Trichloropropane	BRL	µg/L	1.0	0.15	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2,4-Trichlorobenzene	BRL	µg/L	1.0	0.28	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2,4-Trimethylbenzene	BRL	µg/L	1.0	0.14	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2-Dibromo-3-chloropropane	BRL	µg/L	2.0	0.37	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2-Dibromoethane (EDB)	BRL	µg/L	1.0	0.11	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2-Dichlorobenzene	BRL	µg/L	1.0	0.094	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2-Dichloroethane	BRL	µg/L	1.0	0.072	1	8260B	09/09/09 3:13	Iwity	Q44321
1,2-Dichloropropane	BRL	µg/L	1.0	0.081	1	8260B	09/09/09 3:13	Iwity	Q44321
1,3,5-Trimethylbenzene	BRL	µg/L	1.0	0.081	1	8260B	09/09/09 3:13	Iwity	Q44321
1,3-Dichlorobenzene	BRL	µg/L	1.0	0.10	1	8260B	09/09/09 3:13	Iwity	Q44321
1,3-Dichloropropane	BRL	µg/L	1.0	0.062	1	8260B	09/09/09 3:13	Iwity	Q44321
1,4-Dichlorobenzene	BRL	µg/L	1.0	0.092	1	8260B	09/09/09 3:13	Iwity	Q44321
2,2-Dichloropropane	BRL	µg/L	2.0	0.21	1	8260B	09/09/09 3:13	Iwity	Q44321
2-Chloroethyl vinyl ether	BRL	µg/L	2.0	0.37	1	8260B	09/09/09 3:13	Iwity	Q44321
2-Chlorotoluene	BRL	µg/L	1.0	0.090	1	8260B	09/09/09 3:13	Iwity	Q44321
2-Hexanone	BRL	µg/L	5.0	0.20	1	8260B	09/09/09 3:13	Iwity	Q44321
4-Chlorotoluene	BRL	µg/L	1.0	0.13	1	8260B	09/09/09 3:13	Iwity	Q44321
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	5.0	0.93	1	8260B	09/09/09 3:13	Iwity	Q44321
Acetone	BRL	µg/L	10	1.0	1	8260B	09/09/09 3:13	Iwity	Q44321

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449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409



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

# Laboratory Report

09/10/09

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: 256919  
 COC Group: G0909093  
 Time Collected: 09/02/09 8:55  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	100	1.4	1	8260B	09/09/09 3:13	Iwity	Q44321
Acrylonitrile	BRL	µg/L	100	1.4	1	8260B	09/09/09 3:13	Iwity	Q44321
Benzene	BRL	µg/L	1.0	0.044	1	8260B	09/09/09 3:13	Iwity	Q44321
Bromobenzene	BRL	µg/L	1.0	0.098	1	8260B	09/09/09 3:13	Iwity	Q44321
Bromochloromethane	BRL	µg/L	1.0	0.14	1	8260B	09/09/09 3:13	Iwity	Q44321
Bromodichloromethane	BRL	µg/L	1.0	0.076	1	8260B	09/09/09 3:13	Iwity	Q44321
Bromoform	BRL	µg/L	1.0	0.039	1	8260B	09/09/09 3:13	Iwity	Q44321
Bromomethane	BRL	µg/L	3.0	0.27	1	8260B	09/09/09 3:13	Iwity	Q44321
Carbon disulfide	BRL	µg/L	5.0	0.37	1	8260B	09/09/09 3:13	Iwity	Q44321
Carbon tetrachloride	BRL	µg/L	2.0	0.11	1	8260B	09/09/09 3:13	Iwity	Q44321
Chlorobenzene	BRL	µg/L	1.0	0.050	1	8260B	09/09/09 3:13	Iwity	Q44321
Chlorodibromomethane	BRL	µg/L	1.0	0.070	1	8260B	09/09/09 3:13	Iwity	Q44321
Chloroethane	BRL	µg/L	5.0	0.22	1	8260B	09/09/09 3:13	Iwity	Q44321
Chloroform	BRL	µg/L	1.0	0.049	1	8260B	09/09/09 3:13	Iwity	Q44321
Chloromethane	BRL	µg/L	2.0	0.30	1	8260B	09/09/09 3:13	Iwity	Q44321
cis-1,2-Dichloroethene	0.63 J	µg/L	1.0	0.054	1	8260B	09/09/09 3:13	Iwity	Q44321
cis-1,3-Dichloropropene	BRL	µg/L	1.0	0.070	1	8260B	09/09/09 3:13	Iwity	Q44321
Dibromomethane	BRL	µg/L	1.0	0.21	1	8260B	09/09/09 3:13	Iwity	Q44321
Dichlorodifluoromethane	BRL	µg/L	2.0	0.30	1	8260B	09/09/09 3:13	Iwity	Q44321
Ethylbenzene	BRL	µg/L	1.0	0.085	1	8260B	09/09/09 3:13	Iwity	Q44321
Hexachlorobutadiene	BRL	µg/L	2.0	0.30	1	8260B	09/09/09 3:13	Iwity	Q44321
Isopropyl ether (IPE)	BRL	µg/L	1.0	0.076	1	8260B	09/09/09 3:13	Iwity	Q44321
Isopropylbenzene	BRL	µg/L	1.0	0.10	1	8260B	09/09/09 3:13	Iwity	Q44321
m,p-Xylenes	BRL	µg/L	2.0	0.13	1	8260B	09/09/09 3:13	Iwity	Q44321
Methyl ethyl ketone (MEK)	BRL	µg/L	5.0	0.95	1	8260B	09/09/09 3:13	Iwity	Q44321
Methyl t-butyl ether (MTBE)	BRL	µg/L	1.0	0.11	1	8260B	09/09/09 3:13	Iwity	Q44321
Methylene chloride	BRL	µg/L	2.0	0.081	1	8260B	09/09/09 3:13	Iwity	Q44321

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

# Laboratory Report

09/10/09

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: 256919  
 COC Group: G0909093  
 Time Collected: 09/02/09 8:55  
 Time Submitted: 09/03/09 9:45

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	09/09/09 3:13	Iwity	Q44321
n-Propylbenzene	BRL	µg/L	1.0	0.087	1	8260B	09/09/09 3:13	Iwity	Q44321
Naphthalene	BRL	µg/L	1.0	0.23	1	8260B	09/09/09 3:13	Iwity	Q44321
o-Xylene	BRL	µg/L	1.0	0.059	1	8260B	09/09/09 3:13	Iwity	Q44321
p-Isopropyltoluene	BRL	µg/L	1.0	0.14	1	8260B	09/09/09 3:13	Iwity	Q44321
sec-Butylbenzene	BRL	µg/L	1.0	0.12	1	8260B	09/09/09 3:13	Iwity	Q44321
Styrene	BRL	µg/L	1.0	0.051	1	8260B	09/09/09 3:13	Iwity	Q44321
tert-Butylbenzene	BRL	µg/L	1.0	0.074	1	8260B	09/09/09 3:13	Iwity	Q44321
Tetrachloroethene	BRL	µg/L	1.0	0.12	1	8260B	09/09/09 3:13	Iwity	Q44321
Toluene	BRL	µg/L	1.0	0.064	1	8260B	09/09/09 3:13	Iwity	Q44321
trans-1,2-Dichloroethene	BRL	µg/L	2.0	0.066	1	8260B	09/09/09 3:13	Iwity	Q44321
trans-1,3-Dichloropropene	BRL	µg/L	1.0	0.17	1	8260B	09/09/09 3:13	Iwity	Q44321
Trichloroethene	BRL	µg/L	2.0	0.073	1	8260B	09/09/09 3:13	Iwity	Q44321
Trichlorofluoromethane	BRL	µg/L	2.0	0.31	1	8260B	09/09/09 3:13	Iwity	Q44321
Vinyl acetate	BRL	µg/L	20	1.8	1	8260B	09/09/09 3:13	Iwity	Q44321
Vinyl chloride	BRL	µg/L	2.0	0.28	1	8260B	09/09/09 3:13	Iwity	Q44321

Surrogate	% Recovery	Control Limits
Toluene-d8	100	75 - 121
Dibromofluoromethane	102	74 - 133
Bromofluorobenzene	109	69 - 139

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

# Laboratory Report

09/10/09

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: 256919  
 COC Group: G0909093  
 Time Collected: 09/02/09 8:55  
 Time Submitted: 09/03/09 9:45

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



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

# Laboratory Report

09/10/09

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

Project ID: Mills Gap  
 Sample Matrix: Water

Client Sample ID: SW-01  
 Prism Sample ID: 256920  
 COC Group: G0909093  
 Time Collected: 09/02/09 9:05  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b><u>Volatile Organic Compounds by GC/MS</u></b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	20	1.7	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1,1-Trichloroethane	17 J	µg/L	20	1.1	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1,2,2-Tetrachloroethane	BRL	µg/L	20	1.4	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1,2-Trichloroethane	BRL	µg/L	20	1.8	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1-Dichloroethane	BRL	µg/L	20	1.1	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1-Dichloroethene	BRL	µg/L	20	0.92	20	8260B	09/09/09 5:54	Iwity	Q44321
1,1-Dichloropropene	BRL	µg/L	20	1.8	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2,3-Trichlorobenzene	BRL	µg/L	40	4.7	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2,3-Trichloropropane	BRL	µg/L	20	3.0	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2,4-Trichlorobenzene	BRL	µg/L	20	5.5	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2,4-Trimethylbenzene	BRL	µg/L	20	2.8	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2-Dibromo-3-chloropropane	BRL	µg/L	40	7.3	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2-Dibromoethane (EDB)	BRL	µg/L	20	2.2	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2-Dichlorobenzene	BRL	µg/L	20	1.9	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2-Dichloroethane	BRL	µg/L	20	1.4	20	8260B	09/09/09 5:54	Iwity	Q44321
1,2-Dichloropropane	BRL	µg/L	20	1.6	20	8260B	09/09/09 5:54	Iwity	Q44321
1,3,5-Trimethylbenzene	BRL	µg/L	20	1.6	20	8260B	09/09/09 5:54	Iwity	Q44321
1,3-Dichlorobenzene	BRL	µg/L	20	2.0	20	8260B	09/09/09 5:54	Iwity	Q44321
1,3-Dichloropropane	BRL	µg/L	20	1.2	20	8260B	09/09/09 5:54	Iwity	Q44321
1,4-Dichlorobenzene	BRL	µg/L	20	1.8	20	8260B	09/09/09 5:54	Iwity	Q44321
2,2-Dichloropropane	BRL	µg/L	40	4.3	20	8260B	09/09/09 5:54	Iwity	Q44321
2-Chloroethyl vinyl ether	BRL	µg/L	40	7.3	20	8260B	09/09/09 5:54	Iwity	Q44321
2-Chlorotoluene	BRL	µg/L	20	1.8	20	8260B	09/09/09 5:54	Iwity	Q44321
2-Hexanone	BRL	µg/L	100	4.0	20	8260B	09/09/09 5:54	Iwity	Q44321
4-Chlorotoluene	BRL	µg/L	20	2.6	20	8260B	09/09/09 5:54	Iwity	Q44321
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	100	19	20	8260B	09/09/09 5:54	Iwity	Q44321
Acetone	BRL	µg/L	200	20	20	8260B	09/09/09 5:54	Iwity	Q44321

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

# Laboratory Report

09/10/09

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

Project ID: Mills Gap  
 Sample Matrix: Water

Client Sample ID: SW-01  
 Prism Sample ID: 256920  
 COC Group: G0909093  
 Time Collected: 09/02/09 9:05  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	2000	28	20	8260B	09/09/09 5:54	Iwity	Q44321
Acrylonitrile	BRL	µg/L	2000	28	20	8260B	09/09/09 5:54	Iwity	Q44321
Benzene	BRL	µg/L	20	0.88	20	8260B	09/09/09 5:54	Iwity	Q44321
Bromobenzene	BRL	µg/L	20	2.0	20	8260B	09/09/09 5:54	Iwity	Q44321
Bromochloromethane	BRL	µg/L	20	2.8	20	8260B	09/09/09 5:54	Iwity	Q44321
Bromodichloromethane	BRL	µg/L	20	1.5	20	8260B	09/09/09 5:54	Iwity	Q44321
Bromoform	BRL	µg/L	20	0.78	20	8260B	09/09/09 5:54	Iwity	Q44321
Bromomethane	BRL	µg/L	60	5.5	20	8260B	09/09/09 5:54	Iwity	Q44321
Carbon disulfide	BRL	µg/L	100	7.4	20	8260B	09/09/09 5:54	Iwity	Q44321
Carbon tetrachloride	BRL	µg/L	40	2.2	20	8260B	09/09/09 5:54	Iwity	Q44321
Chlorobenzene	BRL	µg/L	20	1.0	20	8260B	09/09/09 5:54	Iwity	Q44321
Chlorodibromomethane	BRL	µg/L	20	1.4	20	8260B	09/09/09 5:54	Iwity	Q44321
Chloroethane	BRL	µg/L	100	4.5	20	8260B	09/09/09 5:54	Iwity	Q44321
Chloroform	BRL	µg/L	20	0.98	20	8260B	09/09/09 5:54	Iwity	Q44321
Chloromethane	BRL	µg/L	40	6.0	20	8260B	09/09/09 5:54	Iwity	Q44321
cis-1,2-Dichloroethene	440	µg/L	20	1.1	20	8260B	09/09/09 5:54	Iwity	Q44321
cis-1,3-Dichloropropene	BRL	µg/L	20	1.4	20	8260B	09/09/09 5:54	Iwity	Q44321
Dibromomethane	BRL	µg/L	20	4.2	20	8260B	09/09/09 5:54	Iwity	Q44321
Dichlorodifluoromethane	BRL	µg/L	40	6.1	20	8260B	09/09/09 5:54	Iwity	Q44321
Ethylbenzene	BRL	µg/L	20	1.7	20	8260B	09/09/09 5:54	Iwity	Q44321
Hexachlorobutadiene	BRL	µg/L	40	6.1	20	8260B	09/09/09 5:54	Iwity	Q44321
Isopropyl ether (IPE)	BRL	µg/L	20	1.5	20	8260B	09/09/09 5:54	Iwity	Q44321
Isopropylbenzene	BRL	µg/L	20	2.1	20	8260B	09/09/09 5:54	Iwity	Q44321
m,p-Xylenes	BRL	µg/L	40	2.7	20	8260B	09/09/09 5:54	Iwity	Q44321
Methyl ethyl ketone (MEK)	BRL	µg/L	100	19	20	8260B	09/09/09 5:54	Iwity	Q44321
Methyl t-butyl ether (MTBE)	BRL	µg/L	20	2.2	20	8260B	09/09/09 5:54	Iwity	Q44321
Methylene chloride	BRL	µg/L	40	1.6	20	8260B	09/09/09 5:54	Iwity	Q44321

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

# Laboratory Report

09/10/09

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

Project ID: Mills Gap  
 Sample Matrix: Water

Client Sample ID: SW-01  
 Prism Sample ID: 256920  
 COC Group: G0909093  
 Time Collected: 09/02/09 9:05  
 Time Submitted: 09/03/09 9:45

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	09/09/09 5:54	Iwitry	Q44321
n-Propylbenzene	BRL	µg/L	20	1.7	20	8260B	09/09/09 5:54	Iwitry	Q44321
Naphthalene	BRL	µg/L	20	4.6	20	8260B	09/09/09 5:54	Iwitry	Q44321
o-Xylene	BRL	µg/L	20	1.2	20	8260B	09/09/09 5:54	Iwitry	Q44321
p-Isopropyltoluene	BRL	µg/L	20	2.8	20	8260B	09/09/09 5:54	Iwitry	Q44321
sec-Butylbenzene	BRL	µg/L	20	2.4	20	8260B	09/09/09 5:54	Iwitry	Q44321
Styrene	BRL	µg/L	20	1.0	20	8260B	09/09/09 5:54	Iwitry	Q44321
tert-Butylbenzene	BRL	µg/L	20	1.5	20	8260B	09/09/09 5:54	Iwitry	Q44321
Tetrachloroethene	BRL	µg/L	20	2.4	20	8260B	09/09/09 5:54	Iwitry	Q44321
Toluene	BRL	µg/L	20	1.3	20	8260B	09/09/09 5:54	Iwitry	Q44321
trans-1,2-Dichloroethene	BRL	µg/L	40	1.3	20	8260B	09/09/09 5:54	Iwitry	Q44321
trans-1,3-Dichloropropene	BRL	µg/L	20	3.3	20	8260B	09/09/09 5:54	Iwitry	Q44321
Trichloroethene	2100	µg/L	40	1.5	20	8260B	09/09/09 5:54	Iwitry	Q44321
Trichlorofluoromethane	BRL	µg/L	40	6.2	20	8260B	09/09/09 5:54	Iwitry	Q44321
Vinyl acetate	BRL	µg/L	400	35	20	8260B	09/09/09 5:54	Iwitry	Q44321
Vinyl chloride	BRL	µg/L	40	5.5	20	8260B	09/09/09 5:54	Iwitry	Q44321

Surrogate	% Recovery	Control Limits
Toluene-d8	101	75 - 121
Dibromofluoromethane	96	74 - 133
Bromofluorobenzene	106	69 - 139

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

# Laboratory Report

09/10/09

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

Project ID: Mills Gap  
 Sample Matrix: Water

Client Sample ID: SW-01  
 Prism Sample ID: 256920  
 COC Group: G0909093  
 Time Collected: 09/02/09 9:05  
 Time Submitted: 09/03/09 9:45

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



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

# Laboratory Report

09/10/09

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: 256921  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:10  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b><u>Volatile Organic Compounds by GC/MS</u></b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	100	8.7	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1,1-Trichloroethane	730	µg/L	100	5.3	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1,2,2-Tetrachloroethane	BRL	µg/L	100	7.1	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1,2-Trichloroethane	BRL	µg/L	100	9.2	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1-Dichloroethane	BRL	µg/L	100	5.3	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1-Dichloroethene	110	µg/L	100	4.6	100	8260B	09/09/09 6:57	Iwity	Q44321
1,1-Dichloropropene	BRL	µg/L	100	8.9	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2,3-Trichlorobenzene	BRL	µg/L	200	23	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2,3-Trichloropropane	BRL	µg/L	100	15	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2,4-Trichlorobenzene	BRL	µg/L	100	28	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2,4-Trimethylbenzene	BRL	µg/L	100	14	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2-Dibromo-3-chloropropane	BRL	µg/L	200	37	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2-Dibromoethane (EDB)	BRL	µg/L	100	11	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2-Dichlorobenzene	BRL	µg/L	100	9.4	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2-Dichloroethane	BRL	µg/L	100	7.2	100	8260B	09/09/09 6:57	Iwity	Q44321
1,2-Dichloropropane	BRL	µg/L	100	8.1	100	8260B	09/09/09 6:57	Iwity	Q44321
1,3,5-Trimethylbenzene	BRL	µg/L	100	8.1	100	8260B	09/09/09 6:57	Iwity	Q44321
1,3-Dichlorobenzene	BRL	µg/L	100	10	100	8260B	09/09/09 6:57	Iwity	Q44321
1,3-Dichloropropane	BRL	µg/L	100	6.2	100	8260B	09/09/09 6:57	Iwity	Q44321
1,4-Dichlorobenzene	BRL	µg/L	100	9.2	100	8260B	09/09/09 6:57	Iwity	Q44321
2,2-Dichloropropane	BRL	µg/L	200	22	100	8260B	09/09/09 6:57	Iwity	Q44321
2-Chloroethyl vinyl ether	BRL	µg/L	200	37	100	8260B	09/09/09 6:57	Iwity	Q44321
2-Chlorotoluene	BRL	µg/L	100	9.0	100	8260B	09/09/09 6:57	Iwity	Q44321
2-Hexanone	BRL	µg/L	500	20	100	8260B	09/09/09 6:57	Iwity	Q44321
4-Chlorotoluene	BRL	µg/L	100	13	100	8260B	09/09/09 6:57	Iwity	Q44321
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	500	93	100	8260B	09/09/09 6:57	Iwity	Q44321
Acetone	BRL	µg/L	1000	100	100	8260B	09/09/09 6:57	Iwity	Q44321

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

# Laboratory Report

09/10/09

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: 256921  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:10  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	10000	140	100	8260B	09/09/09 6:57	Iwity	Q44321
Acrylonitrile	BRL	µg/L	10000	140	100	8260B	09/09/09 6:57	Iwity	Q44321
Benzene	71 J	µg/L	100	4.4	100	8260B	09/09/09 6:57	Iwity	Q44321
Bromobenzene	BRL	µg/L	100	9.8	100	8260B	09/09/09 6:57	Iwity	Q44321
Bromochloromethane	BRL	µg/L	100	14	100	8260B	09/09/09 6:57	Iwity	Q44321
Bromodichloromethane	BRL	µg/L	100	7.6	100	8260B	09/09/09 6:57	Iwity	Q44321
Bromoform	BRL	µg/L	100	3.9	100	8260B	09/09/09 6:57	Iwity	Q44321
Bromomethane	BRL	µg/L	300	27	100	8260B	09/09/09 6:57	Iwity	Q44321
Carbon disulfide	BRL	µg/L	500	37	100	8260B	09/09/09 6:57	Iwity	Q44321
Carbon tetrachloride	BRL	µg/L	200	11	100	8260B	09/09/09 6:57	Iwity	Q44321
Chlorobenzene	BRL	µg/L	100	5.0	100	8260B	09/09/09 6:57	Iwity	Q44321
Chlorodibromomethane	BRL	µg/L	100	7.0	100	8260B	09/09/09 6:57	Iwity	Q44321
Chloroethane	BRL	µg/L	500	22	100	8260B	09/09/09 6:57	Iwity	Q44321
Chloroform	BRL	µg/L	100	4.9	100	8260B	09/09/09 6:57	Iwity	Q44321
Chloromethane	BRL	µg/L	200	30	100	8260B	09/09/09 6:57	Iwity	Q44321
cis-1,2-Dichloroethene	2200	µg/L	100	5.4	100	8260B	09/09/09 6:57	Iwity	Q44321
cis-1,3-Dichloropropene	BRL	µg/L	100	7.0	100	8260B	09/09/09 6:57	Iwity	Q44321
Dibromomethane	BRL	µg/L	100	21	100	8260B	09/09/09 6:57	Iwity	Q44321
Dichlorodifluoromethane	BRL	µg/L	200	31	100	8260B	09/09/09 6:57	Iwity	Q44321
Ethylbenzene	BRL	µg/L	100	8.5	100	8260B	09/09/09 6:57	Iwity	Q44321
Hexachlorobutadiene	BRL	µg/L	200	30	100	8260B	09/09/09 6:57	Iwity	Q44321
Isopropyl ether (IPE)	BRL	µg/L	100	7.6	100	8260B	09/09/09 6:57	Iwity	Q44321
Isopropylbenzene	BRL	µg/L	100	10	100	8260B	09/09/09 6:57	Iwity	Q44321
m,p-Xylenes	86 J	µg/L	200	13	100	8260B	09/09/09 6:57	Iwity	Q44321
Methyl ethyl ketone (MEK)	BRL	µg/L	500	95	100	8260B	09/09/09 6:57	Iwity	Q44321
Methyl t-butyl ether (MTBE)	BRL	µg/L	100	11	100	8260B	09/09/09 6:57	Iwity	Q44321
Methylene chloride	BRL	µg/L	200	8.1	100	8260B	09/09/09 6:57	Iwity	Q44321

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

# Laboratory Report

09/10/09

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: 256921  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:10  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	100	24	100	8260B	09/09/09 6:57	Iwitry	Q44321
n-Propylbenzene	BRL	µg/L	100	8.7	100	8260B	09/09/09 6:57	Iwitry	Q44321
Naphthalene	BRL	µg/L	100	23	100	8260B	09/09/09 6:57	Iwitry	Q44321
o-Xylene	62 J	µg/L	100	5.9	100	8260B	09/09/09 6:57	Iwitry	Q44321
p-Isopropyltoluene	BRL	µg/L	100	14	100	8260B	09/09/09 6:57	Iwitry	Q44321
sec-Butylbenzene	BRL	µg/L	100	12	100	8260B	09/09/09 6:57	Iwitry	Q44321
Styrene	BRL	µg/L	100	5.1	100	8260B	09/09/09 6:57	Iwitry	Q44321
tert-Butylbenzene	BRL	µg/L	100	7.4	100	8260B	09/09/09 6:57	Iwitry	Q44321
Tetrachloroethene	BRL	µg/L	100	12	100	8260B	09/09/09 6:57	Iwitry	Q44321
Toluene	BRL	µg/L	100	6.4	100	8260B	09/09/09 6:57	Iwitry	Q44321
trans-1,2-Dichloroethene	BRL	µg/L	200	6.6	100	8260B	09/09/09 6:57	Iwitry	Q44321
trans-1,3-Dichloropropene	BRL	µg/L	100	17	100	8260B	09/09/09 6:57	Iwitry	Q44321
Trichloroethene	12000	µg/L	2000	73	1000	8260B	09/09/09 7:29	Iwitry	Q44321
Trichlorofluoromethane	BRL	µg/L	200	31	100	8260B	09/09/09 6:57	Iwitry	Q44321
Vinyl acetate	BRL	µg/L	2000	180	100	8260B	09/09/09 6:57	Iwitry	Q44321
Vinyl chloride	BRL	µg/L	200	28	100	8260B	09/09/09 6:57	Iwitry	Q44321

Surrogate	% Recovery	Control Limits
Toluene-d8	100	75 - 121
Dibromofluoromethane	96	74 - 133
Bromofluorobenzene	106	69 - 139

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

# Laboratory Report

09/10/09

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: 256921  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:10  
 Time Submitted: 09/03/09 9:45

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

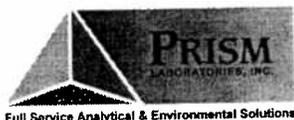
*BRL = Below Reporting Limit*

*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



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

# Laboratory Report

09/10/09

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: 256922  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:20  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b><u>Volatile Organic Compounds by GC/MS</u></b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	40	3.5	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1,1-Trichloroethane	90	µg/L	40	2.1	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1,2,2-Tetrachloroethane	BRL	µg/L	40	2.8	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1,2-Trichloroethane	BRL	µg/L	40	3.7	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1-Dichloroethane	BRL	µg/L	40	2.1	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1-Dichloroethene	32 J	µg/L	40	1.8	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,1-Dichloropropene	BRL	µg/L	40	3.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2,3-Trichlorobenzene	BRL	µg/L	80	9.4	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2,3-Trichloropropane	BRL	µg/L	40	5.9	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2,4-Trichlorobenzene	BRL	µg/L	40	11	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2,4-Trimethylbenzene	BRL	µg/L	40	5.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2-Dibromo-3-chloropropane	BRL	µg/L	80	15	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2-Dibromoethane (EDB)	BRL	µg/L	40	4.4	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2-Dichlorobenzene	BRL	µg/L	40	3.8	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2-Dichloroethane	BRL	µg/L	40	2.9	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,2-Dichloropropane	BRL	µg/L	40	3.2	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,3,5-Trimethylbenzene	BRL	µg/L	40	3.2	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,3-Dichlorobenzene	BRL	µg/L	40	4.0	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,3-Dichloropropane	BRL	µg/L	40	2.5	40	8260B	09/09/09 8:01	Iwitry	Q44321
1,4-Dichlorobenzene	BRL	µg/L	40	3.7	40	8260B	09/09/09 8:01	Iwitry	Q44321
2,2-Dichloropropane	BRL	µg/L	80	8.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
2-Chloroethyl vinyl ether	BRL	µg/L	80	15	40	8260B	09/09/09 8:01	Iwitry	Q44321
2-Chlorotoluene	BRL	µg/L	40	3.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
2-Hexanone	BRL	µg/L	200	8.1	40	8260B	09/09/09 8:01	Iwitry	Q44321
4-Chlorotoluene	BRL	µg/L	40	5.1	40	8260B	09/09/09 8:01	Iwitry	Q44321
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	200	37	40	8260B	09/09/09 8:01	Iwitry	Q44321
Acetone	BRL	µg/L	400	40	40	8260B	09/09/09 8:01	Iwitry	Q44321

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

# Laboratory Report

09/10/09

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: 256922  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:20  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	4000	57	40	8260B	09/09/09 8:01	Iwity	Q44321
Acrylonitrile	BRL	µg/L	4000	55	40	8260B	09/09/09 8:01	Iwity	Q44321
Benzene	BRL	µg/L	40	1.8	40	8260B	09/09/09 8:01	Iwity	Q44321
Bromobenzene	BRL	µg/L	40	3.9	40	8260B	09/09/09 8:01	Iwity	Q44321
Bromochloromethane	BRL	µg/L	40	5.6	40	8260B	09/09/09 8:01	Iwity	Q44321
Bromodichloromethane	BRL	µg/L	40	3.0	40	8260B	09/09/09 8:01	Iwity	Q44321
Bromoform	BRL	µg/L	40	1.6	40	8260B	09/09/09 8:01	Iwity	Q44321
Bromomethane	BRL	µg/L	120	11	40	8260B	09/09/09 8:01	Iwity	Q44321
Carbon disulfide	BRL	µg/L	200	15	40	8260B	09/09/09 8:01	Iwity	Q44321
Carbon tetrachloride	BRL	µg/L	80	4.3	40	8260B	09/09/09 8:01	Iwity	Q44321
Chlorobenzene	BRL	µg/L	40	2.0	40	8260B	09/09/09 8:01	Iwity	Q44321
Chlorodibromomethane	BRL	µg/L	40	2.8	40	8260B	09/09/09 8:01	Iwity	Q44321
Chloroethane	BRL	µg/L	200	8.9	40	8260B	09/09/09 8:01	Iwity	Q44321
Chloroform	BRL	µg/L	40	2.0	40	8260B	09/09/09 8:01	Iwity	Q44321
Chloromethane	BRL	µg/L	80	12	40	8260B	09/09/09 8:01	Iwity	Q44321
cis-1,2-Dichloroethene	BRL	µg/L	40	2.2	40	8260B	09/09/09 8:01	Iwity	Q44321
cis-1,3-Dichloropropene	BRL	µg/L	40	2.8	40	8260B	09/09/09 8:01	Iwity	Q44321
Dibromomethane	BRL	µg/L	40	8.4	40	8260B	09/09/09 8:01	Iwity	Q44321
Dichlorodifluoromethane	BRL	µg/L	80	12	40	8260B	09/09/09 8:01	Iwity	Q44321
Ethylbenzene	BRL	µg/L	40	3.4	40	8260B	09/09/09 8:01	Iwity	Q44321
Hexachlorobutadiene	BRL	µg/L	80	12	40	8260B	09/09/09 8:01	Iwity	Q44321
Isopropyl ether (IPE)	BRL	µg/L	40	3.0	40	8260B	09/09/09 8:01	Iwity	Q44321
Isopropylbenzene	BRL	µg/L	40	4.2	40	8260B	09/09/09 8:01	Iwity	Q44321
m,p-Xylenes	BRL	µg/L	80	5.3	40	8260B	09/09/09 8:01	Iwity	Q44321
Methyl ethyl ketone (MEK)	BRL	µg/L	200	38	40	8260B	09/09/09 8:01	Iwity	Q44321
Methyl t-butyl ether (MTBE)	BRL	µg/L	40	4.4	40	8260B	09/09/09 8:01	Iwity	Q44321
Methylene chloride	BRL	µg/L	80	3.2	40	8260B	09/09/09 8:01	Iwity	Q44321

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

# Laboratory Report

09/10/09

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: 256922  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:20  
 Time Submitted: 09/03/09 9:45

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	09/09/09 8:01	Iwitry	Q44321
n-Propylbenzene	BRL	µg/L	40	3.5	40	8260B	09/09/09 8:01	Iwitry	Q44321
Naphthalene	BRL	µg/L	40	9.1	40	8260B	09/09/09 8:01	Iwitry	Q44321
o-Xylene	BRL	µg/L	40	2.4	40	8260B	09/09/09 8:01	Iwitry	Q44321
p-Isopropyltoluene	BRL	µg/L	40	5.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
sec-Butylbenzene	BRL	µg/L	40	4.8	40	8260B	09/09/09 8:01	Iwitry	Q44321
Styrene	BRL	µg/L	40	2.0	40	8260B	09/09/09 8:01	Iwitry	Q44321
tert-Butylbenzene	BRL	µg/L	40	3.0	40	8260B	09/09/09 8:01	Iwitry	Q44321
Tetrachloroethene	BRL	µg/L	40	4.8	40	8260B	09/09/09 8:01	Iwitry	Q44321
Toluene	BRL	µg/L	40	2.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
trans-1,2-Dichloroethene	BRL	µg/L	80	2.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
trans-1,3-Dichloropropene	BRL	µg/L	40	6.6	40	8260B	09/09/09 8:01	Iwitry	Q44321
Trichloroethene	17000	µg/L	800	29	400	8260B	09/09/09 8:33	Iwitry	Q44321
Trichlorofluoromethane	BRL	µg/L	80	12	40	8260B	09/09/09 8:01	Iwitry	Q44321
Vinyl acetate	BRL	µg/L	800	70	40	8260B	09/09/09 8:01	Iwitry	Q44321
Vinyl chloride	BRL	µg/L	80	11	40	8260B	09/09/09 8:01	Iwitry	Q44321

Surrogate	% Recovery	Control Limits
Toluene-d8	101	75 - 121
Dibromofluoromethane	96	74 - 133
Bromofluorobenzene	108	69 - 139

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

# Laboratory Report

09/10/09

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: 256922  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:20  
 Time Submitted: 09/03/09 9:45

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



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

# Laboratory Report

09/10/09

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

Project ID: Mills Gap  
 Sample Matrix: Water

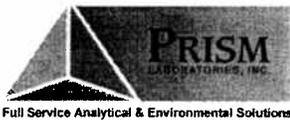
Client Sample ID: Spring-04  
 Prism Sample ID: 256923  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:30  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<b><u>Volatile Organic Compounds by GC/MS</u></b>									
1,1,1,2-Tetrachloroethane	BRL	µg/L	400	35	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1,1-Trichloroethane	BRL	µg/L	400	21	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1,2,2-Tetrachloroethane	BRL	µg/L	400	28	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1,2-Trichloroethane	BRL	µg/L	400	37	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1-Dichloroethane	BRL	µg/L	400	21	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1-Dichloroethene	BRL	µg/L	400	18	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,1-Dichloropropene	BRL	µg/L	400	36	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2,3-Trichlorobenzene	BRL	µg/L	800	94	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2,3-Trichloropropane	BRL	µg/L	400	59	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2,4-Trichlorobenzene	BRL	µg/L	400	110	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2,4-Trimethylbenzene	BRL	µg/L	400	56	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2-Dibromo-3-chloropropane	BRL	µg/L	800	150	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2-Dibromoethane (EDB)	BRL	µg/L	400	44	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2-Dichlorobenzene	BRL	µg/L	400	38	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2-Dichloroethane	BRL	µg/L	400	29	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,2-Dichloropropane	BRL	µg/L	400	32	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,3,5-Trimethylbenzene	BRL	µg/L	400	32	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,3-Dichlorobenzene	BRL	µg/L	400	40	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,3-Dichloropropane	BRL	µg/L	400	25	400	8260B	09/09/09 6:26	Iwityr	Q44321
1,4-Dichlorobenzene	BRL	µg/L	400	37	400	8260B	09/09/09 6:26	Iwityr	Q44321
2,2-Dichloropropane	BRL	µg/L	800	86	400	8260B	09/09/09 6:26	Iwityr	Q44321
2-Chloroethyl vinyl ether	BRL	µg/L	800	150	400	8260B	09/09/09 6:26	Iwityr	Q44321
2-Chlorotoluene	BRL	µg/L	400	36	400	8260B	09/09/09 6:26	Iwityr	Q44321
2-Hexanone	BRL	µg/L	2000	81	400	8260B	09/09/09 6:26	Iwityr	Q44321
4-Chlorotoluene	BRL	µg/L	400	51	400	8260B	09/09/09 6:26	Iwityr	Q44321
4-Methyl-2-pentanone (MIBK)	BRL	µg/L	2000	370	400	8260B	09/09/09 6:26	Iwityr	Q44321
Acetone	BRL	µg/L	4000	400	400	8260B	09/09/09 6:26	Iwityr	Q44321

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

# Laboratory Report

09/10/09

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: 256923  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:30  
 Time Submitted: 09/03/09 9:45

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	40000	570	400	8260B	09/09/09 6:26	Iwity	Q44321
Acrylonitrile	BRL	µg/L	40000	550	400	8260B	09/09/09 6:26	Iwity	Q44321
Benzene	BRL	µg/L	400	18	400	8260B	09/09/09 6:26	Iwity	Q44321
Bromobenzene	BRL	µg/L	400	39	400	8260B	09/09/09 6:26	Iwity	Q44321
Bromochloromethane	BRL	µg/L	400	56	400	8260B	09/09/09 6:26	Iwity	Q44321
Bromodichloromethane	BRL	µg/L	400	30	400	8260B	09/09/09 6:26	Iwity	Q44321
Bromoform	BRL	µg/L	400	16	400	8260B	09/09/09 6:26	Iwity	Q44321
Bromomethane	BRL	µg/L	1200	110	400	8260B	09/09/09 6:26	Iwity	Q44321
Carbon disulfide	BRL	µg/L	2000	150	400	8260B	09/09/09 6:26	Iwity	Q44321
Carbon tetrachloride	BRL	µg/L	800	43	400	8260B	09/09/09 6:26	Iwity	Q44321
Chlorobenzene	BRL	µg/L	400	20	400	8260B	09/09/09 6:26	Iwity	Q44321
Chlorodibromomethane	BRL	µg/L	400	28	400	8260B	09/09/09 6:26	Iwity	Q44321
Chloroethane	BRL	µg/L	2000	89	400	8260B	09/09/09 6:26	Iwity	Q44321
Chloroform	BRL	µg/L	400	20	400	8260B	09/09/09 6:26	Iwity	Q44321
Chloromethane	BRL	µg/L	800	120	400	8260B	09/09/09 6:26	Iwity	Q44321
cis-1,2-Dichloroethene	1900	µg/L	400	22	400	8260B	09/09/09 6:26	Iwity	Q44321
cis-1,3-Dichloropropene	BRL	µg/L	400	28	400	8260B	09/09/09 6:26	Iwity	Q44321
Dibromomethane	BRL	µg/L	400	84	400	8260B	09/09/09 6:26	Iwity	Q44321
Dichlorodifluoromethane	BRL	µg/L	800	120	400	8260B	09/09/09 6:26	Iwity	Q44321
Ethylbenzene	BRL	µg/L	400	34	400	8260B	09/09/09 6:26	Iwity	Q44321
Hexachlorobutadiene	BRL	µg/L	800	120	400	8260B	09/09/09 6:26	Iwity	Q44321
Isopropyl ether (IPE)	BRL	µg/L	400	30	400	8260B	09/09/09 6:26	Iwity	Q44321
Isopropylbenzene	BRL	µg/L	400	42	400	8260B	09/09/09 6:26	Iwity	Q44321
m,p-Xylenes	BRL	µg/L	800	53	400	8260B	09/09/09 6:26	Iwity	Q44321
Methyl ethyl ketone (MEK)	BRL	µg/L	2000	380	400	8260B	09/09/09 6:26	Iwity	Q44321
Methyl t-butyl ether (MTBE)	BRL	µg/L	400	44	400	8260B	09/09/09 6:26	Iwity	Q44321
Methylene chloride	BRL	µg/L	800	32	400	8260B	09/09/09 6:26	Iwity	Q44321

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

# Laboratory Report

09/10/09

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: 256923  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:30  
 Time Submitted: 09/03/09 9:45

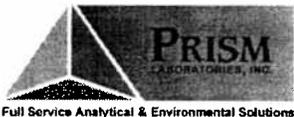
Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
n-Butylbenzene	BRL	µg/L	400	97	400	8260B	09/09/09 6:26	lwitry	Q44321
n-Propylbenzene	BRL	µg/L	400	35	400	8260B	09/09/09 6:26	lwitry	Q44321
Naphthalene	BRL	µg/L	400	91	400	8260B	09/09/09 6:26	lwitry	Q44321
o-Xylene	BRL	µg/L	400	24	400	8260B	09/09/09 6:26	lwitry	Q44321
p-Isopropyltoluene	BRL	µg/L	400	56	400	8260B	09/09/09 6:26	lwitry	Q44321
sec-Butylbenzene	BRL	µg/L	400	48	400	8260B	09/09/09 6:26	lwitry	Q44321
Styrene	BRL	µg/L	400	20	400	8260B	09/09/09 6:26	lwitry	Q44321
tert-Butylbenzene	BRL	µg/L	400	30	400	8260B	09/09/09 6:26	lwitry	Q44321
Tetrachloroethene	BRL	µg/L	400	48	400	8260B	09/09/09 6:26	lwitry	Q44321
Toluene	BRL	µg/L	400	26	400	8260B	09/09/09 6:26	lwitry	Q44321
trans-1,2-Dichloroethene	BRL	µg/L	800	26	400	8260B	09/09/09 6:26	lwitry	Q44321
trans-1,3-Dichloropropene	BRL	µg/L	400	66	400	8260B	09/09/09 6:26	lwitry	Q44321
Trichloroethene	21000	µg/L	800	29	400	8260B	09/09/09 6:26	lwitry	Q44321
Trichlorofluoromethane	BRL	µg/L	800	120	400	8260B	09/09/09 6:26	lwitry	Q44321
Vinyl acetate	BRL	µg/L	8000	700	400	8260B	09/09/09 6:26	lwitry	Q44321
Vinyl chloride	BRL	µg/L	800	110	400	8260B	09/09/09 6:26	lwitry	Q44321

Surrogate	% Recovery	Control Limits
Toluene-d8	99	75 - 121
Dibromofluoromethane	97	74 - 133
Bromofluorobenzene	109	69 - 139

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

# Laboratory Report

09/10/09

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: 256923  
 COC Group: G0909093  
 Time Collected: 09/02/09 10:30  
 Time Submitted: 09/03/09 9:45

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

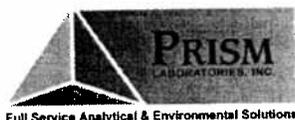
*BRL = Below Reporting Limit*

*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



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

# Level II QC Report

09/10/09

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

Project ID: Mills Gap

COC Group Number: G0909093  
 Date/Time Submitted: 09/03/09 9:45

## Volatiles 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	Q44321
1,1,1-Trichloroethane	ND	1	<0.5	µg/L	Q44321
1,1,2,2-Tetrachloroethane	ND	1	<0.5	µg/L	Q44321
1,1,2-Trichloroethane	ND	1	<0.5	µg/L	Q44321
1,1-Dichloroethane	ND	1	<0.5	µg/L	Q44321
1,1-Dichloroethene	ND	1	<0.5	µg/L	Q44321
1,1-Dichloropropene	ND	1	<0.5	µg/L	Q44321
1,2,3-Trichlorobenzene	ND	2	<1	µg/L	Q44321
1,2,3-Trichloropropane	ND	1	<0.5	µg/L	Q44321
1,2,4-Trichlorobenzene	ND	1	<0.5	µg/L	Q44321
1,2,4-Trimethylbenzene	ND	1	<0.5	µg/L	Q44321
1,2-Dibromo-3-chloropropane	ND	2	<1	µg/L	Q44321
1,2-Dibromoethane (EDB)	ND	1	<0.5	µg/L	Q44321
1,2-Dichlorobenzene	ND	1	<0.5	µg/L	Q44321
1,2-Dichloroethane	ND	1	<0.5	µg/L	Q44321
1,2-Dichloropropane	ND	1	<0.5	µg/L	Q44321
1,3,5-Trimethylbenzene	ND	1	<0.5	µg/L	Q44321
1,3-Dichlorobenzene	ND	1	<0.5	µg/L	Q44321
1,3-Dichloropropane	ND	1	<0.5	µg/L	Q44321
1,4-Dichlorobenzene	ND	1	<0.5	µg/L	Q44321
2,2-Dichloropropane	ND	2	<1	µg/L	Q44321
2-Chloroethyl vinyl ether	ND	2	<1	µg/L	Q44321
2-Chlorotoluene	ND	1	<0.5	µg/L	Q44321
2-Hexanone	ND	5	<2.5	µg/L	Q44321
4-Chlorotoluene	ND	1	<0.5	µg/L	Q44321
4-Methyl-2-pentanone (MIBK)	ND	5	<2.5	µg/L	Q44321
Acetone	ND	10	<5	µg/L	Q44321
Acrolein	ND	100	<50	µg/L	Q44321
Acrylonitrile	ND	100	<50	µg/L	Q44321
Benzene	ND	1	<0.5	µg/L	Q44321
Bromobenzene	ND	1	<0.5	µg/L	Q44321
Bromochloromethane	ND	1	<0.5	µg/L	Q44321
Bromodichloromethane	ND	1	<0.5	µg/L	Q44321
Bromoform	ND	1	<0.5	µg/L	Q44321

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

# Level II QC Report

09/10/09

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

Project ID: Mills Gap

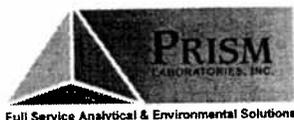
COC Group Number: G0909093  
Date/Time Submitted: 09/03/09 9:45

## Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Bromomethane	ND	3	<1.5	µg/L	Q44321
Carbon disulfide	ND	5	<2.5	µg/L	Q44321
Carbon tetrachloride	ND	2	<1	µg/L	Q44321
Chlorobenzene	ND	1	<0.5	µg/L	Q44321
Chlorodibromomethane	ND	1	<0.5	µg/L	Q44321
Chloroethane	ND	5	<2.5	µg/L	Q44321
Chloroform	ND	1	<0.5	µg/L	Q44321
Chloromethane	ND	2	<1	µg/L	Q44321
cis-1,2-Dichloroethene	ND	1	<0.5	µg/L	Q44321
cis-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q44321
Dibromomethane	ND	1	<0.5	µg/L	Q44321
Dichlorodifluoromethane	ND	2	<1	µg/L	Q44321
Ethylbenzene	ND	1	<0.5	µg/L	Q44321
Hexachlorobutadiene	ND	2	<1	µg/L	Q44321
Isopropyl ether (IPE)	ND	1	<0.5	µg/L	Q44321
Isopropylbenzene	ND	1	<0.5	µg/L	Q44321
m,p-Xylenes	ND	2	<1	µg/L	Q44321
Methyl ethyl ketone (MEK)	ND	5	<2.5	µg/L	Q44321
Methyl t-butyl ether (MTBE)	ND	1	<0.5	µg/L	Q44321
Methylene chloride	ND	2	<1	µg/L	Q44321
n-Butylbenzene	ND	1	<0.5	µg/L	Q44321
n-Propylbenzene	ND	1	<0.5	µg/L	Q44321
Naphthalene	ND	1	<0.5	µg/L	Q44321
o-Xylene	ND	1	<0.5	µg/L	Q44321
p-Isopropyltoluene	ND	1	<0.5	µg/L	Q44321
sec-Butylbenzene	ND	1	<0.5	µg/L	Q44321
Styrene	ND	1	<0.5	µg/L	Q44321
tert-Butylbenzene	ND	1	<0.5	µg/L	Q44321
Tetrachloroethene	ND	1	<0.5	µg/L	Q44321
Toluene	ND	1	<0.5	µg/L	Q44321
trans-1,2-Dichloroethene	ND	2	<1	µg/L	Q44321
trans-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q44321
Trichloroethene	ND	2	<1	µg/L	Q44321
Trichlorofluoromethane	ND	2	<1	µg/L	Q44321
Vinyl acetate	ND	20	<10	µg/L	Q44321
Vinyl chloride	ND	2	<1	µg/L	Q44321

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

# Level II QC Report

09/10/09

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

Project ID: Mills Gap

COC Group Number: G0909093  
 Date/Time Submitted: 09/03/09 9:45

Laboratory Control Sample	Result	Spike Amount	Units	Recovery %	Recovery Ranges %	QC Batch ID
1,1-Dichloroethene	50.41	50	µg/L	101	62-141	Q44321
Benzene	54.68	50	µg/L	109	70-141	Q44321
Chlorobenzene	44.12	50	µg/L	88	88-120	Q44321
Toluene	51.15	50	µg/L	102	78-130	Q44321
Trichloroethene	55.48	50	µg/L	111	78-124	Q44321

Matrix Spike	Result	Spike Amount	Units	Recovery %	Recovery Ranges %	QC Batch ID
Sample ID: 256919 1,1-Dichloroethene	2029.6	2000	µg/L	101	54-140	Q44321
Benzene	2269.6	2000	µg/L	113	62-129	Q44321
Chlorobenzene	1804.4	2000	µg/L	90	64-127	Q44321
Toluene	2077.6	2000	µg/L	104	60-131	Q44321
Trichloroethene	2162	2000	µg/L	108	52-128	Q44321

Matrix Spike Duplicate	Result	Spike Amount	Units	Recovery %	Recovery Ranges %	RPD %	RPD Range %	QC Batch ID
Sample ID: 256919 1,1-Dichloroethene	1933.2	2000	µg/L	97	54-140	5	0 - 20	Q44321
Benzene	2222.8	2000	µg/L	111	62-129	2	0 - 19	Q44321
Chlorobenzene	1748	2000	µg/L	87	64-127	3	0 - 20	Q44321
Toluene	2038.4	2000	µg/L	102	60-131	2	0 - 21	Q44321
Trichloroethene	2123.6	2000	µg/L	106	52-128	2	0 - 18	Q44321

#-See Case Narrative



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Client Company Name: MAGTEC  
 Report To/Contact Name: Susan Kelly  
 Reporting Address: 1308 Patton Ave  
Asheville, NC 28806

Phone: 828.252.8338 Fax (Yes) (NO) 828.251.9690  
 Email (Yes) (No) Email Address: SKelly@magtec.com  
 EDD Type: PDF  Excel  Other   
 Site Location Name: Mills Gap Road Site  
 Site Location Physical Address: Mills Gap Rd, Skyland, NC

# CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: 25110822308

Project Name: \_\_\_\_\_  
 Short Hold Analysis: (Yes) (No) (NO) UST Project: (Yes) (No) (NO)  
 \*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: MAGTEC  
 Address: 1105 Lefebvre Parkway Suite 300  
Alpharetta, GA 30009

Purchase Order No./Billing Reference: 200902761  
 Requested Due Date  1 Day  2 Days  3 Days  4 Days  5 Days  
 "Working Days"  6-9 Days  Standard 10 days  Pre-Approved  
 Samples received after 15:00 will be processed next business day.  
 Turnaround time is based on business days, excluding weekends and holidays.  
 (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

**LAB USE ONLY**

Samples INTACT upon arrival? YES  NO  N/A   
 Received ON WET ICE? Temp 3L YES  NO   
 PROPER PRESERVATIVES indicated? YES  NO   
 Received WITHIN HOLDING TIMES? YES  NO   
 CUSTODY SEALS INTACT? YES  NO   
 VOLATILES rec'd W/OUT HEADSPACE? YES  NO   
 PROPER CONTAINERS used? YES  NO

**TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL**  
 Certification: NELAC \_\_\_\_\_ USACE \_\_\_\_\_ FL \_\_\_\_\_ NC   
 SC \_\_\_\_\_ OTHER \_\_\_\_\_ N/A \_\_\_\_\_  
 Water Chlorinated: YES \_\_\_\_\_ NO   
 Sample Iced Upon Collection: YES \_\_\_\_\_ NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				TYPE SEE BELOW	NO.	SIZE				
Spring-01 ds	9-2-09	0855	water	VOA	3	4ml	HCL			256919
S42-01	9-2-09	0905	water	VOA	3	40 ml	HCL			256920
Spring-02	9-2-09	1010	water	VOA	3	40 ml	HCL			256921
Spring-03	9-2-09	1020	water	VOA	3	40 ml	HCL			256922
Spring-04	9-2-09	1030	water	VOA	3	40 ml	HCL			256923

**PRESS DOWN FIRMLY - 3 COPIES**

Sampler's Signature: [Signature] Sampled By (Print Name): Wm. Kirk Weir Affiliation: MAGTEC  
 Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) [Signature] Received By: (Signature) FedEx Date: 9-2-09 Military/Hours: 1830  
 Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature] Date: \_\_\_\_\_ Additional Comments: \_\_\_\_\_  
 Relinquished By: (Signature) [Signature] Received For Prism Laboratories By: [Signature] Date: 9-2-09 9:45  
 Method of Shipment:  UPS  Hand-delivered  Prism Field Service  Other \_\_\_\_\_  
 NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.  
 \*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

**PRISM USE ONLY**

Site Arrival Time: \_\_\_\_\_  
 Site Departure Time: \_\_\_\_\_  
 Field Tech Fee: \_\_\_\_\_  
 Mileage: \_\_\_\_\_

SEE REVERSE FOR TERMS & CONDITIONS

**ORIGINAL**

