



# MACTEC

engineering and constructing a better tomorrow

August 26, 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 63  
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 July 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,

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: July 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 July 31, 2009, MACTEC submitted the June 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 June 22, 2009. An estimated 11 pounds of volatile organic compounds (VOCs) were removed by the SVE system in June 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 July 20, 2009. The SVE system operated for approximately 537 hours during the month of July 2009. An estimated 77 pounds of VOCs were removed by the SVE system in July 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 G132-2079, dated August 4, 2009 (sample collected July 20, 2009).
- An estimated 6,173 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 G0709231, dated July 14, 2009 (samples collected July 7, 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: G132-2079

Client Project: Mills Gap Road Site

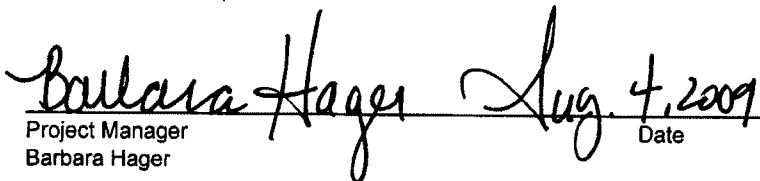
Dear Susan Kelly,

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.

 Aug. 4, 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

% 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: MG-45B  
Client Project ID: Mills Gap Road Site  
Lab Sample ID: G132-2079-2A  
Lab Project ID: G132-2079

Analyzed By: EAW  
Date Collected: 7/20/2009 11:22  
Date Received: 7/21/2009  
Matrix: Air


Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	0.4	1	7/31/2009
Bromochloromethane	BQL	0.4	1	7/31/2009
Bromodichloromethane	BQL	0.4	1	7/31/2009
Bromoform	BQL	0.4	1	7/31/2009
Carbon tetrachloride	BQL	0.4	1	7/31/2009
Chlorobenzene	BQL	0.4	1	7/31/2009
Chloroform	BQL	0.4	1	7/31/2009
Dibromochloromethane	BQL	0.4	1	7/31/2009
1,2-Dibromoethane (EDB)	BQL	0.4	1	7/31/2009
1,2-Dichlorobenzene	BQL	0.4	1	7/31/2009
1,3-Dichlorobenzene	BQL	0.4	1	7/31/2009
1,4-Dichlorobenzene	BQL	0.4	1	7/31/2009
1,1-Dichloroethane	BQL	0.4	1	7/31/2009
1,1-Dichloroethene	BQL	0.4	1	7/31/2009
1,2-Dichloroethane	BQL	0.4	1	7/31/2009
cis-1,2-Dichloroethene	BQL	0.4	1	7/31/2009
trans-1,2-dichloroethene	BQL	0.4	1	7/31/2009
1,2-Dichloropropane	BQL	0.4	1	7/31/2009
cis-1,3-Dichloropropene	BQL	0.4	1	7/31/2009
trans-1,3-Dichloropropene	BQL	0.4	1	7/31/2009
Diisopropyl ether	BQL	0.4	1	7/31/2009
Ethylbenzene	BQL	0.4	1	7/31/2009
Methyl-tert-butyl ether	BQL	0.4	1	7/31/2009
Styrene	BQL	0.4	1	7/31/2009
1,1,2,2-Tetrachloroethane	BQL	0.4	1	7/31/2009
Tetrachloroethene	BQL	0.4	1	7/31/2009
Toluene	BQL	0.4	1	7/31/2009
Trichloroethene	BQL	0.4	1	7/31/2009
1,1,1-Trichloroethane	BQL	0.4	1	7/31/2009
1,1,2-Trichloroethane	BQL	0.4	1	7/31/2009
m-,p-Xylene	BQL	0.8	1	7/31/2009
o-Xylene	BQL	0.4	1	7/31/2009

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: 



# CHAIN OF CUSTODY RECORD

## SGS Environmental Services Inc.

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

091325

1		CLIENT: <b>MACTEC</b>		SGS Reference: <b>G132-2079</b>		PAGE <b>1</b> OF <b>1</b>	
CONTACT: <b>SUSAN KELLY</b>		PHONE NO: <b>(828) 252-8130</b>					
PROJECT: <b>MACTEC GAP ROAD SITE</b>		SITE/PROJECT ID#:					
REPORTS TO: <b>1308 Patton Avenue</b>		E-MAIL: <b>seball@mactec.com</b>					
INVOICE TO: <b>ASHLEYVILLE, NC 28806</b>		FAX NO: <b>(828) 251-9690</b>					
QUOTE #		P.O. NUMBER <b>2008 16692</b>					
2		3		4		5	
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No	SAMPLE TYPE	REMARKS
	MG-45 A	7/20/09	1122	Air	1	G	
	MG-45 B	7/20/09	1122	Air	1	G	
	MG-45 A	7/20/09	1135	Air	1	G	
	MG-45 B	7/20/09	1135	Air	1	G	
SGS North America, Inc.							
Collected/Relinquished By: (1) <i>[Signature]</i>		Date	Time	Received By: <i>[Signature]</i>	Date	Time	Shipping Carrier: <b>FED-EX</b>
Relinquished By: (2)		Date	Time	Received By:	Date	Time	Shipping Ticket No: <b>889096330</b> Temperature (C): <b>21.5</b>
Relinquished By: (3)		Date	Time	Received By:	Date	Time	Special Deliverable Requirements: Chain of Custody Seal: (Circle) <b>INTACT</b> <b>BROKEN</b> <b>ABSENT</b>
Relinquished By: (4)		Date	Time	Received By:	Date	Time	Special Instructions: <b>Assume 10 L of Air</b> <b>A = initial B = breakthrough</b>
						Requested Turnaround Time: <input type="checkbox"/> RUSH <input checked="" type="checkbox"/> STD	



## Case Narrative

**Date:** 07/14/09  
**Company:** MACTEC Eng. & Consulting, Inc  
**Contact:** Susan Kelly  
**Address:** 1308 Patton Avenue  
Asheville, NC 28806

**Client Project ID:** Mills Gap  
**Prism COC Group No:** G0709231  
**Collection Date(s):** 07/07/09  
**Lab Submittal Date(s):** 07/08/09

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:** 07/14/09

**Approval Date:** 07/14/09

### **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

07/14/09

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: 251301  
COC Group: G0709231  
Time Collected: 07/07/09 15:00  
Time Submitted: 07/08/09 12:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	100	1.4	1	8260B	07/10/09 11:38	lwitry	Q42863
Acrylonitrile	BRL	µg/L	100	1.4	1	8260B	07/10/09 11:38	lwitry	Q42863
Benzene	BRL	µg/L	1.0	0.044	1	8260B	07/10/09 11:38	lwitry	Q42863
Bromobenzene	BRL	µg/L	1.0	0.098	1	8260B	07/10/09 11:38	lwitry	Q42863
Bromochloromethane	BRL	µg/L	1.0	0.14	1	8260B	07/10/09 11:38	lwitry	Q42863
Bromodichloromethane	BRL	µg/L	1.0	0.076	1	8260B	07/10/09 11:38	lwitry	Q42863
Bromoform	BRL	µg/L	1.0	0.039	1	8260B	07/10/09 11:38	lwitry	Q42863
Bromomethane	BRL	µg/L	3.0	0.27	1	8260B	07/10/09 11:38	lwitry	Q42863
Carbon disulfide	BRL	µg/L	5.0	0.37	1	8260B	07/10/09 11:38	lwitry	Q42863
Carbon tetrachloride	BRL	µg/L	2.0	0.11	1	8260B	07/10/09 11:38	lwitry	Q42863
Chlorobenzene	BRL	µg/L	1.0	0.050	1	8260B	07/10/09 11:38	lwitry	Q42863
Chlorodibromomethane	BRL	µg/L	1.0	0.070	1	8260B	07/10/09 11:38	lwitry	Q42863
Chloroethane	BRL	µg/L	5.0	0.22	1	8260B	07/10/09 11:38	lwitry	Q42863
Chloroform	BRL	µg/L	1.0	0.049	1	8260B	07/10/09 11:38	lwitry	Q42863
Chloromethane	BRL	µg/L	2.0	0.30	1	8260B	07/10/09 11:38	lwitry	Q42863
cis-1,2-Dichloroethene	1.1	µg/L	1.0	0.054	1	8260B	07/10/09 11:38	lwitry	Q42863
cis-1,3-Dichloropropene	BRL	µg/L	1.0	0.070	1	8260B	07/10/09 11:38	lwitry	Q42863
Dibromomethane	BRL	µg/L	1.0	0.21	1	8260B	07/10/09 11:38	lwitry	Q42863
Dichlorodifluoromethane	BRL	µg/L	2.0	0.30	1	8260B	07/10/09 11:38	lwitry	Q42863
Ethylbenzene	BRL	µg/L	1.0	0.085	1	8260B	07/10/09 11:38	lwitry	Q42863
Hexachlorobutadiene	BRL	µg/L	2.0	0.30	1	8260B	07/10/09 11:38	lwitry	Q42863
Isopropyl ether (IPE)	BRL	µg/L	1.0	0.076	1	8260B	07/10/09 11:38	lwitry	Q42863
Isopropylbenzene	BRL	µg/L	1.0	0.10	1	8260B	07/10/09 11:38	lwitry	Q42863
m,p-Xylenes	BRL	µg/L	2.0	0.13	1	8260B	07/10/09 11:38	lwitry	Q42863
Methyl ethyl ketone (MEK)	BRL	µg/L	5.0	0.95	1	8260B	07/10/09 11:38	lwitry	Q42863
Methyl t-butyl ether (MTBE)	BRL	µg/L	1.0	0.11	1	8260B	07/10/09 11:38	lwitry	Q42863
Methylene chloride	BRL	µg/L	2.0	0.081	1	8260B	07/10/09 11:38	lwitry	Q42863

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Page 2 of 20





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

## Laboratory Report

07/14/09

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: 251301  
COC Group: G0709231  
Time Collected: 07/07/09 15:00  
Time Submitted: 07/08/09 12:10

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*

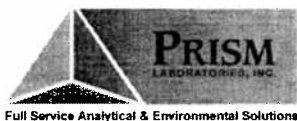
Angela D. Overcash, V.P. Laboratory Services

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Page 4 of 20



NC Certification No. 402  
 SC Certification No. 99012  
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# Laboratory Report

07/14/09

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: 251302  
 COC Group: G0709231  
 Time Collected: 07/07/09 15:25  
 Time Submitted: 07/08/09 12:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	1000	14	10	8260B	07/10/09 13:46	Iwity	Q42863
Acrylonitrile	BRL	µg/L	1000	14	10	8260B	07/10/09 13:46	Iwity	Q42863
Benzene	BRL	µg/L	10	0.44	10	8260B	07/10/09 13:46	Iwity	Q42863
Bromobenzene	BRL	µg/L	10	0.98	10	8260B	07/10/09 13:46	Iwity	Q42863
Bromochloromethane	BRL	µg/L	10	1.4	10	8260B	07/10/09 13:46	Iwity	Q42863
Bromodichloromethane	BRL	µg/L	10	0.76	10	8260B	07/10/09 13:46	Iwity	Q42863
Bromoform	BRL	µg/L	10	0.39	10	8260B	07/10/09 13:46	Iwity	Q42863
Bromomethane	BRL	µg/L	30	2.7	10	8260B	07/10/09 13:46	Iwity	Q42863
Carbon disulfide	BRL	µg/L	50	3.7	10	8260B	07/10/09 13:46	Iwity	Q42863
Carbon tetrachloride	BRL	µg/L	20	1.1	10	8260B	07/10/09 13:46	Iwity	Q42863
Chlorobenzene	BRL	µg/L	10	0.50	10	8260B	07/10/09 13:46	Iwity	Q42863
Chlorodibromomethane	BRL	µg/L	10	0.70	10	8260B	07/10/09 13:46	Iwity	Q42863
Chloroethane	BRL	µg/L	50	2.2	10	8260B	07/10/09 13:46	Iwity	Q42863
Chloroform	BRL	µg/L	10	0.49	10	8260B	07/10/09 13:46	Iwity	Q42863
Chloromethane	BRL	µg/L	20	3.0	10	8260B	07/10/09 13:46	Iwity	Q42863
cis-1,2-Dichloroethene	440	µg/L	10	0.54	10	8260B	07/10/09 13:46	Iwity	Q42863
cis-1,3-Dichloropropene	BRL	µg/L	10	0.70	10	8260B	07/10/09 13:46	Iwity	Q42863
Dibromomethane	BRL	µg/L	10	2.1	10	8260B	07/10/09 13:46	Iwity	Q42863
Dichlorodifluoromethane	BRL	µg/L	20	3.0	10	8260B	07/10/09 13:46	Iwity	Q42863
Ethylbenzene	BRL	µg/L	10	0.85	10	8260B	07/10/09 13:46	Iwity	Q42863
Hexachlorobutadiene	BRL	µg/L	20	3.0	10	8260B	07/10/09 13:46	Iwity	Q42863
Isopropyl ether (IPE)	BRL	µg/L	10	0.76	10	8260B	07/10/09 13:46	Iwity	Q42863
Isopropylbenzene	BRL	µg/L	10	1.0	10	8260B	07/10/09 13:46	Iwity	Q42863
m,p-Xylenes	BRL	µg/L	20	1.3	10	8260B	07/10/09 13:46	Iwity	Q42863
Methyl ethyl ketone (MEK)	BRL	µg/L	50	9.5	10	8260B	07/10/09 13:46	Iwity	Q42863
Methyl t-butyl ether (MTBE)	BRL	µg/L	10	1.1	10	8260B	07/10/09 13:46	Iwity	Q42863
Methylene chloride	BRL	µg/L	20	0.81	10	8260B	07/10/09 13:46	Iwity	Q42863

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NC Drinking Water Cert. No. 37735

## Laboratory Report

07/14/09

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: 251302  
COC Group: G0709231  
Time Collected: 07/07/09 15:25  
Time Submitted: 07/08/09 12:10

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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Page 8 of 20



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

# Laboratory Report

07/14/09

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: 251303  
COC Group: G0709231  
Time Collected: 07/07/09 15:45  
Time Submitted: 07/08/09 12:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	10000	140	100	8260B	07/10/09 14:49	Iwity	Q42863
Acrylonitrile	BRL	µg/L	10000	140	100	8260B	07/10/09 14:49	Iwity	Q42863
Benzene	91 J	µg/L	100	4.4	100	8260B	07/10/09 14:49	Iwity	Q42863
Bromobenzene	BRL	µg/L	100	9.8	100	8260B	07/10/09 14:49	Iwity	Q42863
Bromochloromethane	BRL	µg/L	100	14	100	8260B	07/10/09 14:49	Iwity	Q42863
Bromodichloromethane	BRL	µg/L	100	7.6	100	8260B	07/10/09 14:49	Iwity	Q42863
Bromoform	BRL	µg/L	100	3.9	100	8260B	07/10/09 14:49	Iwity	Q42863
Bromomethane	BRL	µg/L	300	27	100	8260B	07/10/09 14:49	Iwity	Q42863
Carbon disulfide	BRL	µg/L	500	37	100	8260B	07/10/09 14:49	Iwity	Q42863
Carbon tetrachloride	BRL	µg/L	200	11	100	8260B	07/10/09 14:49	Iwity	Q42863
Chlorobenzene	BRL	µg/L	100	5.0	100	8260B	07/10/09 14:49	Iwity	Q42863
Chlorodibromomethane	BRL	µg/L	100	7.0	100	8260B	07/10/09 14:49	Iwity	Q42863
Chloroethane	BRL	µg/L	500	22	100	8260B	07/10/09 14:49	Iwity	Q42863
Chloroform	BRL	µg/L	100	4.9	100	8260B	07/10/09 14:49	Iwity	Q42863
Chloromethane	BRL	µg/L	200	30	100	8260B	07/10/09 14:49	Iwity	Q42863
cis-1,2-Dichloroethene	1200	µg/L	100	5.4	100	8260B	07/10/09 14:49	Iwity	Q42863
cis-1,3-Dichloropropene	BRL	µg/L	100	7.0	100	8260B	07/10/09 14:49	Iwity	Q42863
Dibromomethane	BRL	µg/L	100	21	100	8260B	07/10/09 14:49	Iwity	Q42863
Dichlorodifluoromethane	BRL	µg/L	200	31	100	8260B	07/10/09 14:49	Iwity	Q42863
Ethylbenzene	BRL	µg/L	100	8.5	100	8260B	07/10/09 14:49	Iwity	Q42863
Hexachlorobutadiene	BRL	µg/L	200	30	100	8260B	07/10/09 14:49	Iwity	Q42863
Isopropyl ether (IPE)	BRL	µg/L	100	7.6	100	8260B	07/10/09 14:49	Iwity	Q42863
Isopropylbenzene	BRL	µg/L	100	10	100	8260B	07/10/09 14:49	Iwity	Q42863
m,p-Xylenes	BRL	µg/L	200	13	100	8260B	07/10/09 14:49	Iwity	Q42863
Methyl ethyl ketone (MEK)	BRL	µg/L	500	95	100	8260B	07/10/09 14:49	Iwity	Q42863
Methyl t-butyl ether (MTBE)	BRL	µg/L	100	11	100	8260B	07/10/09 14:49	Iwity	Q42863
Methylene chloride	BRL	µg/L	200	8.1	100	8260B	07/10/09 14:49	Iwity	Q42863

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Page 10 of 20



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

## Laboratory Report

07/14/09

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: 251303  
COC Group: G0709231  
Time Collected: 07/07/09 15:45  
Time Submitted: 07/08/09 12:10

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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Page 12 of 20



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

## Laboratory Report

07/14/09

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: 251304  
COC Group: G0709231  
Time Collected: 07/07/09 16:05  
Time Submitted: 07/08/09 12:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	40000	570	400	8260B	07/10/09 12:10	Iwity	Q42863
Acrylonitrile	BRL	µg/L	40000	550	400	8260B	07/10/09 12:10	Iwity	Q42863
Benzene	BRL	µg/L	400	18	400	8260B	07/10/09 12:10	Iwity	Q42863
Bromobenzene	BRL	µg/L	400	39	400	8260B	07/10/09 12:10	Iwity	Q42863
Bromochloromethane	BRL	µg/L	400	56	400	8260B	07/10/09 12:10	Iwity	Q42863
Bromodichloromethane	BRL	µg/L	400	30	400	8260B	07/10/09 12:10	Iwity	Q42863
Bromoform	BRL	µg/L	400	16	400	8260B	07/10/09 12:10	Iwity	Q42863
Bromomethane	BRL	µg/L	1200	110	400	8260B	07/10/09 12:10	Iwity	Q42863
Carbon disulfide	BRL	µg/L	2000	150	400	8260B	07/10/09 12:10	Iwity	Q42863
Carbon tetrachloride	BRL	µg/L	800	43	400	8260B	07/10/09 12:10	Iwity	Q42863
Chlorobenzene	BRL	µg/L	400	20	400	8260B	07/10/09 12:10	Iwity	Q42863
Chlorodibromomethane	BRL	µg/L	400	28	400	8260B	07/10/09 12:10	Iwity	Q42863
Chloroethane	BRL	µg/L	2000	89	400	8260B	07/10/09 12:10	Iwity	Q42863
Chloroform	BRL	µg/L	400	20	400	8260B	07/10/09 12:10	Iwity	Q42863
Chloromethane	BRL	µg/L	800	120	400	8260B	07/10/09 12:10	Iwity	Q42863
cis-1,2-Dichloroethene	BRL	µg/L	400	22	400	8260B	07/10/09 12:10	Iwity	Q42863
cis-1,3-Dichloropropene	BRL	µg/L	400	28	400	8260B	07/10/09 12:10	Iwity	Q42863
Dibromomethane	BRL	µg/L	400	84	400	8260B	07/10/09 12:10	Iwity	Q42863
Dichlorodifluoromethane	BRL	µg/L	800	120	400	8260B	07/10/09 12:10	Iwity	Q42863
Ethylbenzene	BRL	µg/L	400	34	400	8260B	07/10/09 12:10	Iwity	Q42863
Hexachlorobutadiene	BRL	µg/L	800	120	400	8260B	07/10/09 12:10	Iwity	Q42863
Isopropyl ether (IPE)	BRL	µg/L	400	30	400	8260B	07/10/09 12:10	Iwity	Q42863
Isopropylbenzene	BRL	µg/L	400	42	400	8260B	07/10/09 12:10	Iwity	Q42863
m,p-Xylenes	BRL	µg/L	800	53	400	8260B	07/10/09 12:10	Iwity	Q42863
Methyl ethyl ketone (MEK)	BRL	µg/L	2000	380	400	8260B	07/10/09 12:10	Iwity	Q42863
Methyl t-butyl ether (MTBE)	BRL	µg/L	400	44	400	8260B	07/10/09 12:10	Iwity	Q42863
Methylene chloride	BRL	µg/L	800	32	400	8260B	07/10/09 12:10	Iwity	Q42863

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Page 14 of 20



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

## Laboratory Report

07/14/09

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: 251304  
COC Group: G0709231  
Time Collected: 07/07/09 16:05  
Time Submitted: 07/08/09 12:10

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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Page 16 of 20



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

# Laboratory Report

07/14/09

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: 251305  
 COC Group: G0709231  
 Time Collected: 07/07/09 16:30  
 Time Submitted: 07/08/09 12:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Acrolein	BRL	µg/L	10000	140	100	8260B	07/10/09 12:42	Iwity	Q42863
Acrylonitrile	BRL	µg/L	10000	140	100	8260B	07/10/09 12:42	Iwity	Q42863
Benzene	BRL	µg/L	100	4.4	100	8260B	07/10/09 12:42	Iwity	Q42863
Bromobenzene	BRL	µg/L	100	9.8	100	8260B	07/10/09 12:42	Iwity	Q42863
Bromochloromethane	BRL	µg/L	100	14	100	8260B	07/10/09 12:42	Iwity	Q42863
Bromodichloromethane	BRL	µg/L	100	7.6	100	8260B	07/10/09 12:42	Iwity	Q42863
Bromoform	BRL	µg/L	100	3.9	100	8260B	07/10/09 12:42	Iwity	Q42863
Bromomethane	BRL	µg/L	300	27	100	8260B	07/10/09 12:42	Iwity	Q42863
Carbon disulfide	BRL	µg/L	500	37	100	8260B	07/10/09 12:42	Iwity	Q42863
Carbon tetrachloride	BRL	µg/L	200	11	100	8260B	07/10/09 12:42	Iwity	Q42863
Chlorobenzene	BRL	µg/L	100	5.0	100	8260B	07/10/09 12:42	Iwity	Q42863
Chlorodibromomethane	BRL	µg/L	100	7.0	100	8260B	07/10/09 12:42	Iwity	Q42863
Chloroethane	BRL	µg/L	500	22	100	8260B	07/10/09 12:42	Iwity	Q42863
Chloroform	BRL	µg/L	100	4.9	100	8260B	07/10/09 12:42	Iwity	Q42863
Chloromethane	BRL	µg/L	200	30	100	8260B	07/10/09 12:42	Iwity	Q42863
cis-1,2-Dichloroethene	1300	µg/L	100	5.4	100	8260B	07/10/09 12:42	Iwity	Q42863
cis-1,3-Dichloropropene	BRL	µg/L	100	7.0	100	8260B	07/10/09 12:42	Iwity	Q42863
Dibromomethane	BRL	µg/L	100	21	100	8260B	07/10/09 12:42	Iwity	Q42863
Dichlorodifluoromethane	BRL	µg/L	200	31	100	8260B	07/10/09 12:42	Iwity	Q42863
Ethylbenzene	BRL	µg/L	100	8.5	100	8260B	07/10/09 12:42	Iwity	Q42863
Hexachlorobutadiene	BRL	µg/L	200	30	100	8260B	07/10/09 12:42	Iwity	Q42863
Isopropyl ether (IPE)	BRL	µg/L	100	7.6	100	8260B	07/10/09 12:42	Iwity	Q42863
Isopropylbenzene	BRL	µg/L	100	10	100	8260B	07/10/09 12:42	Iwity	Q42863
m,p-Xylenes	BRL	µg/L	200	13	100	8260B	07/10/09 12:42	Iwity	Q42863
Methyl ethyl ketone (MEK)	BRL	µg/L	500	95	100	8260B	07/10/09 12:42	Iwity	Q42863
Methyl t-butyl ether (MTBE)	BRL	µg/L	100	11	100	8260B	07/10/09 12:42	Iwity	Q42863
Methylene chloride	BRL	µg/L	200	8.1	100	8260B	07/10/09 12:42	Iwity	Q42863

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Page 18 of 20





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

## Laboratory Report

07/14/09

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: 251305  
COC Group: G0709231  
Time Collected: 07/07/09 16:30  
Time Submitted: 07/08/09 12:10

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*

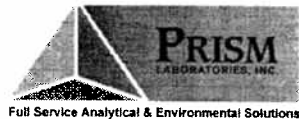
Angela D. Overcash, V.P. Laboratory Services

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Page 20 of 20



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

## Level II QC Report

07/14/09

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

Project ID: Mills Gap

COC Group Number: G0709231  
 Date/Time Submitted: 07/08/09 12:10

### Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Bromomethane	ND	3	<1.5	µg/L	Q42863
Carbon disulfide	ND	5	<2.5	µg/L	Q42863
Carbon tetrachloride	ND	2	<1	µg/L	Q42863
Chlorobenzene	ND	1	<0.5	µg/L	Q42863
Chlorodibromomethane	ND	1	<0.5	µg/L	Q42863
Chloroethane	ND	5	<2.5	µg/L	Q42863
Chloroform	ND	1	<0.5	µg/L	Q42863
Chloromethane	ND	2	<1	µg/L	Q42863
cis-1,2-Dichloroethene	ND	1	<0.5	µg/L	Q42863
cis-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q42863
Dibromomethane	ND	1	<0.5	µg/L	Q42863
Dichlorodifluoromethane	ND	2	<1	µg/L	Q42863
Ethylbenzene	ND	1	<0.5	µg/L	Q42863
Hexachlorobutadiene	ND	2	<1	µg/L	Q42863
Isopropyl ether (IPE)	ND	1	<0.5	µg/L	Q42863
Isopropylbenzene	ND	1	<0.5	µg/L	Q42863
m,p-Xylenes	ND	2	<1	µg/L	Q42863
Methyl ethyl ketone (MEK)	ND	5	<2.5	µg/L	Q42863
Methyl t-butyl ether (MTBE)	ND	1	<0.5	µg/L	Q42863
Methylene chloride	ND	2	<1	µg/L	Q42863
n-Butylbenzene	ND	1	<0.5	µg/L	Q42863
n-Propylbenzene	ND	1	<0.5	µg/L	Q42863
Naphthalene	ND	1	<0.5	µg/L	Q42863
o-Xylene	ND	1	<0.5	µg/L	Q42863
p-Isopropyltoluene	ND	1	<0.5	µg/L	Q42863
sec-Butylbenzene	ND	1	<0.5	µg/L	Q42863
Styrene	ND	1	<0.5	µg/L	Q42863
tert-Butylbenzene	ND	1	<0.5	µg/L	Q42863
Tetrachloroethene	ND	1	<0.5	µg/L	Q42863
Toluene	ND	1	<0.5	µg/L	Q42863
trans-1,2-Dichloroethene	ND	2	<1	µg/L	Q42863
trans-1,3-Dichloropropene	ND	1	<0.5	µg/L	Q42863
Trichloroethene	ND	2	<1	µg/L	Q42863
Trichlorofluoromethane	ND	2	<1	µg/L	Q42863
Vinyl acetate	ND	20	<10	µg/L	Q42863
Vinyl chloride	ND	2	<1	µg/L	Q42863

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