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June 23, 2008

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 49  
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 May 2008.

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 line extending from 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**

## **Monthly Progress Report**

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**Reporting Period: May 2008**

**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 May 27, 2008, MACTEC submitted the April 2008 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 April 21, 2008. An estimated 73 pounds of volatile organic compounds (VOCs) were removed by the SVE system in April 2008.
- On April 23, 2008, MACTEC submitted a "Response to EPA Letter of March 28, 2008: Technical Approach for Removal Action at Spring Area" in which in-situ oxidation via an ozone sparging system was recommended.

### **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 May 21, 2008. An estimated 186 pounds of VOCs were removed by the SVE system in May 2008. The SVE system operated for approximately 393 hours during the month of May 2008. The analytical data indicates increased VOC recovery from July 2007 to February 2008 and again in May 2008 (i.e., relative to results from the first six months of 2007). This general increased recovery in the later half of 2007 and early 2008 is presumably because of a lowering of the water table, which is a result of regional drought conditions (i.e., contamination formerly below the 'normal' water table was exposed and recovered by the SVE system). 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 received during the period includes:
  - SGS Environmental Services, Inc. Report G132-1909, dated June 4, 2008 (sample collected May 21, 2008).
- An estimated 3,327 pounds of VOCs have been removed by the SVE system since its initial operation on July 20, 2006.

### **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.



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

Report Number: G132-1909

Client Project: Mills Gap

Dear Susan Kelly,

Enclosed are the results of the analytical services performed under the referenced project. 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 the services performed during this project, please call SGS Environmental Services at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,  
SGS Environmental Services, Inc.

A handwritten signature in cursive script, reading 'Ashley Nifong', followed by the date '6/4/08'. The signature is written over a horizontal line.  
Project Manager      Date  
Ashley Nifong



## List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation 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

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.

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

Client Sample ID: MG-31A 5/21/08 Front Half  
Client Project ID: Mills Gap  
Lab Sample ID: G132-1909-3A  
Lab Project ID: G132-1909

Analyzed By: DES  
Date Collected: 5/21/2008 14:41  
Date Received: 5/23/2008  
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	10.0000	10	6/3/2008
Bromochloromethane	BQL	10.0000	10	6/3/2008
Bromodichloromethane	BQL	10.0000	10	6/3/2008
Bromoform	BQL	10.0000	10	6/3/2008
Carbon tetrachloride	BQL	10.0000	10	6/3/2008
Chlorobenzene	BQL	10.0000	10	6/3/2008
Chloroform	BQL	10.0000	10	6/3/2008
Dibromochloromethane	BQL	10.0000	10	6/3/2008
1,2-Dibromoethane (EDB)	BQL	10.0000	10	6/3/2008
1,2-Dichlorobenzene	BQL	10.0000	10	6/3/2008
1,3-Dichlorobenzene	BQL	10.0000	10	6/3/2008
1,4-Dichlorobenzene	BQL	10.0000	10	6/3/2008
1,1-Dichloroethane	BQL	10.0000	10	6/3/2008
1,1-Dichloroethene	BQL	10.0000	10	6/3/2008
1,2-Dichloroethane	BQL	10.0000	10	6/3/2008
cis-1,2-Dichloroethene	BQL	10.0000	10	6/3/2008
trans-1,2-dichloroethene	BQL	10.0000	10	6/3/2008
1,2-Dichloropropane	BQL	10.0000	10	6/3/2008
cis-1,3-Dichloropropene	BQL	10.0000	10	6/3/2008
trans-1,3-Dichloropropene	BQL	10.0000	10	6/3/2008
Diisopropyl ether	BQL	10.0000	10	6/3/2008
Ethylbenzene	BQL	10.0000	10	6/3/2008
Methyl-tert-butyl ether	BQL	10.0000	10	6/3/2008
Styrene	BQL	10.0000	10	6/3/2008
1,1,2,2-Tetrachloroethane	BQL	10.0000	10	6/3/2008
Tetrachloroethene	BQL	10.0000	10	6/3/2008
Toluene	19.2	10.0000	10	6/3/2008
Trichloroethene	277	10.0000	10	6/3/2008
1,1,1-Trichloroethane	21.5	10.0000	10	6/3/2008
1,1,2-Trichloroethane	BQL	10.0000	10	6/3/2008
m-,p-Xylene	BQL	20.0000	10	6/3/2008
o-Xylene	BQL	10.0000	10	6/3/2008

**Comments:**

Quantitation at 25°C and 1 atm.

**Flags:**

BQL = Below quantitation limit.

Reviewed By: 

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

Client Sample ID: MG-31B 5/21/08 Back Half  
Client Project ID: Mills Gap  
Lab Sample ID: G132-1909-4A  
Lab Project ID: G132-1909

Analyzed By: DES  
Date Collected: 5/21/2008 14:41  
Date Received: 5/23/2008  
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	0.4000	1	6/2/2008
Bromochloromethane	BQL	0.4000	1	6/2/2008
Bromodichloromethane	BQL	0.4000	1	6/2/2008
Bromoform	BQL	0.4000	1	6/2/2008
Carbon tetrachloride	BQL	0.4000	1	6/2/2008
Chlorobenzene	BQL	0.4000	1	6/2/2008
Chloroform	BQL	0.4000	1	6/2/2008
Dibromochloromethane	BQL	0.4000	1	6/2/2008
1,2-Dibromoethane (EDB)	BQL	0.4000	1	6/2/2008
1,2-Dichlorobenzene	BQL	0.4000	1	6/2/2008
1,3-Dichlorobenzene	BQL	0.4000	1	6/2/2008
1,4-Dichlorobenzene	BQL	0.4000	1	6/2/2008
1,1-Dichloroethane	BQL	0.4000	1	6/2/2008
1,1-Dichloroethene	BQL	0.4000	1	6/2/2008
1,2-Dichloroethane	BQL	0.4000	1	6/2/2008
cis-1,2-Dichloroethene	BQL	0.4000	1	6/2/2008
trans-1,2-dichloroethene	BQL	0.4000	1	6/2/2008
1,2-Dichloropropane	BQL	0.4000	1	6/2/2008
cis-1,3-Dichloropropene	BQL	0.4000	1	6/2/2008
trans-1,3-Dichloropropene	BQL	0.4000	1	6/2/2008
Diisopropyl ether	BQL	0.4000	1	6/2/2008
Ethylbenzene	BQL	0.4000	1	6/2/2008
Methyl-tert-butyl ether	BQL	0.4000	1	6/2/2008
Styrene	BQL	0.4000	1	6/2/2008
1,1,2,2-Tetrachloroethane	BQL	0.4000	1	6/2/2008
Tetrachloroethene	BQL	0.4000	1	6/2/2008
Toluene	BQL	0.4000	1	6/2/2008
Trichloroethene	BQL	0.4000	1	6/2/2008
1,1,1-Trichloroethane	BQL	0.4000	1	6/2/2008
1,1,2-Trichloroethane	BQL	0.4000	1	6/2/2008
m-,p-Xylene	BQL	0.8000	1	6/2/2008
o-Xylene	BQL	0.4000	1	6/2/2008

**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-31A (and B)  
Client Project ID: Mills Gap  
Lab Sample ID: G132-1909-3 and -4  
Lab Project ID: G132-1909

Analyzed By: EAW  
Date Collected: 5/21/2008 14:56  
Date Received: 5/23/2008  
Matrix: Air

Analyte	Result mg/m <sup>3</sup>	RL mg/m <sup>3</sup>	Prep Method	Dilution Factor	Date Analyzed
Initial Tube: Diesel Range Organics	29.2	10	MM18	1	06/02/08
Analyte	Result mg/m <sup>3</sup>	RL mg/m <sup>3</sup>	Prep Method	Dilution Factor	Date Analyzed
Breakthrough tube: Diesel Range Organics	BQL	4	MM18	1	06/02/08

Comments:

Flags:



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1 CLIENT: **MATTEC Engineering** PHONE NO: **800 252 0130**  
CONTACT: **SUSAN KENT** SITE/PWSID#: \_\_\_\_\_  
PROJECT: **Mills Gap** E-MAIL: **sevelly@mattec.com**  
REPORTS TO: **1300 Patton Ave** FAX NO.: ( )  
**Asheville, NC 28906**  
INVOICE TO: \_\_\_\_\_  
QUOTE # \_\_\_\_\_  
P.O. NUMBER **200801748**

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LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX
	<b>MG-31A 5/24/08</b>	<b>5/24/08</b>	<b>1456</b>	<b>air</b>
	<b>MG-31B 5/24/08</b>	<b>5/24/08</b>	<b>1456</b>	<b>air</b>
	<b>MG-31A 5/24/08</b>	<b>5/24/08</b>	<b>1441</b>	<b>air</b>
	<b>MG-31B 5/24/08</b>	<b>5/24/08</b>	<b>1441</b>	<b>air</b>

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Collected/Relinquished By: (1)	Date	Time	Received By:	Date	Time
<b>Amendy</b>	<b>5/24/08</b>	<b>1400</b>	<b>Sevelly</b>	<b>5/24/08</b>	<b>1020</b>
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

SGS Reference: **032-1969**

No	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
1	C	XAD	3	VECS 8260 DEO BOLS
2			X	
3			X	
4			X	
5			X	

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Shipping Carrier: <b>FedEx</b>	Samples Received Cold? (Circle) YES (NO)
<b>800065540344</b>	<b>(NO)</b>
Shipping Ticket No: _____	Temperature (C): <b>ambient</b>
Special Deliverable Requirements:	Chain of Custody Seal: (Circle) <b>INTACT</b> <b>BROKEN</b> <b>ABSENT</b>
Special Instructions: <b>Assume 10 Liters of air</b> <b>A = initial tube</b> <b>B = breakthrough tube</b>	
Requested Turnaround Time:	
<input type="checkbox"/> RUSH	<input type="checkbox"/> STD
Date Needed	