



engineering and constructing a better tomorrow

copy sent to repository

May 5, 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 47
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 March 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,

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

Reporting Period: March 2008

CERCLA Docket No. CER-04-2004-3755

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 April 9, 2008, MACTEC submitted the February 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 February 22, 2008. An estimated 291 pounds of volatile organic compounds (VOCs) were discharged from the SVE system operation in February 2008.

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 March 21, 2008. An estimated 110 pounds of VOCs were discharged from SVE system operation in March 2008. The SVE system operated for approximately 288 hours during the month of March 2008. The analytical data indicates increased VOC recovery from July 2007 to February 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 G132-1885, dated April 9, 2008 (sample collected March 21, 2008).
- An estimated 3,068 pounds of VOCs have been discharged from 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.



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

Report Number: G132-1885

Client Project: CTS-Mills Gap

Dear Ms. 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 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.


Project Manager
Erin Stagaard

4/9/08
Date



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 = Reporting 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 29A 3/21/2008 Front Half
Client Project ID: CTS-Mills Gap
Lab Sample ID: G132-1885-3A
Lab Project ID: G132-1885

Analyzed By: DES
Date Collected: 3/21/2008 14:23
Date Received: 3/25/2008
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	10.0000	10	4/8/2008
Bromochloromethane	BQL	10.0000	10	4/8/2008
Bromodichloromethane	BQL	10.0000	10	4/8/2008
Bromoform	BQL	10.0000	10	4/8/2008
Carbon tetrachloride	BQL	10.0000	10	4/8/2008
Chlorobenzene	BQL	10.0000	10	4/8/2008
Chloroform	BQL	10.0000	10	4/8/2008
Dibromochloromethane	BQL	10.0000	10	4/8/2008
1,2-Dibromoethane (EDB)	BQL	10.0000	10	4/8/2008
1,2-Dichlorobenzene	BQL	10.0000	10	4/8/2008
1,3-Dichlorobenzene	BQL	10.0000	10	4/8/2008
1,4-Dichlorobenzene	BQL	10.0000	10	4/8/2008
1,1-Dichloroethane	BQL	10.0000	10	4/8/2008
1,1-Dichloroethene	BQL	10.0000	10	4/8/2008
1,2-Dichloroethane	BQL	10.0000	10	4/8/2008
cis-1,2-Dichloroethene	BQL	10.0000	10	4/8/2008
trans-1,2-dichloroethene	BQL	10.0000	10	4/8/2008
1,2-Dichloropropane	BQL	10.0000	10	4/8/2008
cis-1,3-Dichloropropene	BQL	10.0000	10	4/8/2008
trans-1,3-Dichloropropene	BQL	10.0000	10	4/8/2008
Diisopropyl ether	BQL	10.0000	10	4/8/2008
Ethylbenzene	BQL	10.0000	10	4/8/2008
Methyl-tert-butyl ether	BQL	10.0000	10	4/8/2008
Styrene	BQL	10.0000	10	4/8/2008
1,1,2,2-Tetrachloroethane	BQL	10.0000	10	4/8/2008
Tetrachloroethene	BQL	10.0000	10	4/8/2008
Toluene	15.4	10.0000	10	4/8/2008
Trichloroethene	233	10.0000	10	4/8/2008
1,1,1-Trichloroethane	20.7	10.0000	10	4/8/2008
1,1,2-Trichloroethane	BQL	10.0000	10	4/8/2008
m-,p-Xylene	BQL	20.0000	10	4/8/2008
o-Xylene	BQL	10.0000	10	4/8/2008

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 29B 3/21/2008 Back Half
Client Project ID: CTS-Mills Gap
Lab Sample ID: G132-1885-4A
Lab Project ID: G132-1885

Analyzed By: DES
Date Collected: 3/21/2008 14:23
Date Received: 3/25/2008
Matrix: Air

Compound	Result mg/m3	Quantitation Limit mg/m3	Dilution Factor	Date Analyzed
Benzene	BQL	0.4000	1	4/8/2008
Bromochloromethane	BQL	0.4000	1	4/8/2008
Bromodichloromethane	BQL	0.4000	1	4/8/2008
Bromoform	BQL	0.4000	1	4/8/2008
Carbon tetrachloride	BQL	0.4000	1	4/8/2008
Chlorobenzene	BQL	0.4000	1	4/8/2008
Chloroform	BQL	0.4000	1	4/8/2008
Dibromochloromethane	BQL	0.4000	1	4/8/2008
1,2-Dibromoethane (EDB)	BQL	0.4000	1	4/8/2008
1,2-Dichlorobenzene	BQL	0.4000	1	4/8/2008
1,3-Dichlorobenzene	BQL	0.4000	1	4/8/2008
1,4-Dichlorobenzene	BQL	0.4000	1	4/8/2008
1,1-Dichloroethane	BQL	0.4000	1	4/8/2008
1,1-Dichloroethene	BQL	0.4000	1	4/8/2008
1,2-Dichloroethane	BQL	0.4000	1	4/8/2008
cis-1,2-Dichloroethene	BQL	0.4000	1	4/8/2008
trans-1,2-dichloroethene	BQL	0.4000	1	4/8/2008
1,2-Dichloropropane	BQL	0.4000	1	4/8/2008
cis-1,3-Dichloropropene	BQL	0.4000	1	4/8/2008
trans-1,3-Dichloropropene	BQL	0.4000	1	4/8/2008
Diisopropyl ether	BQL	0.4000	1	4/8/2008
Ethylbenzene	BQL	0.4000	1	4/8/2008
Methyl-tert-butyl ether	BQL	0.4000	1	4/8/2008
Styrene	BQL	0.4000	1	4/8/2008
1,1,2,2-Tetrachloroethane	BQL	0.4000	1	4/8/2008
Tetrachloroethene	BQL	0.4000	1	4/8/2008
Toluene	BQL	0.4000	1	4/8/2008
Trichloroethene	BQL	0.4000	1	4/8/2008
1,1,1-Trichloroethane	BQL	0.4000	1	4/8/2008
1,1,2-Trichloroethane	BQL	0.4000	1	4/8/2008
m-,p-Xylene	BQL	0.8000	1	4/8/2008
o-Xylene	BQL	0.4000	1	4/8/2008

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-29A (and B) 3/21/08
Client Project ID: CTS-Mills Gap
Lab Sample ID: G132-1885-1 and -2
Lab Project ID: G132-1885

Analyzed By: EAW
Date Collected: 3/21/2008 14:08
Date Received: 3/25/2008
Matrix: Air

Analyte	Result mg/m ³	RL mg/m ³	Prep Method	Dilution Factor	Date Analyzed
Initial Tube: Diesel Range Organics	24.1	10	MM18	1	04/01/08
Analyte	Result mg/m ³	RL mg/m ³	Prep Method	Dilution Factor	Date Analyzed
Breakthrough tube: Diesel Range Organics	BQL	4	MM18	1	04/01/08

Comments:

Flags:



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

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



093

1

CLIENT: Mactec Engineering & Consulting Inc.
 CONTACT: Susan Kelly PHONE NO: (828) 252-8130
 PROJECT: CTS- Mills Creek SITE/PWSID#: _____
 REPORTS TO: 1308 Patton Ave. E-MAIL: setkelly@Mactec.com
Asheville NC, 28806 FAX NO.: (828) 251-9690
 INVOICE TO: QUOTE # _____
 P.O. NUMBER 200801748

SGS Reference: G132-1885 PAGE 1 OF 1

No	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
CONTAINERS				
1	G	C MO	0260 VOCs 015 DKO	X
1	G			X
1	G			X
1	G			X

4

Shipping Carrier: Fed-EX Samples Received Cold? (Circle) YES NO
 Shipping Ticket No: 86005576208 Temperature (C): ambient
 Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT ABSENT
 Special Instructions: Assume 10 liters of Air
 Requested Turnaround Time: A=initial B=breakthrough tube
 RUSH STD Date Needed _____

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX
	M6-29A	3/21/2008	1408	Air
	M6-29B	3/21/2008	1408	Air
	M6-29A	3/21/2008	1423	Air
	M6-29B	3/21/2008	1423	Air

5

Collected/Relinquished By: (1)	Date	Time	Received By:	Date	Time
<u>Wm Kirk Weir</u>	<u>3/21/08</u>	<u>1100</u>	<u>[Signature]</u>	<u>3/25/08</u>	<u>1005</u>
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