

April 20, 2009  
File No. 21.0056192.10

Mr. Richard Eisenman  
Delphi Automotive Systems LLC  
1000 Lexington Ave  
Rochester, New York



Re: Additional Downgradient & Building 6 UST Area Groundwater Sampling  
November 2008  
Delphi Thermal Systems Facility  
Lockport, New York

Dear Mr. Eisenman:

535 Washington Street  
11th Floor  
Buffalo, New York  
14203  
716-685-2300  
FAX 716-685-3629  
www.gza.com

GZA GeoEnvironmental of New York (GZA) prepared this letter report to summarize the results of resampling the four downgradient monitoring wells (MW-6-1, MW-6-2, MW-7-2 and MW-7-4) and the three monitoring wells (MW-6-7, MW-6-8 and MW-6-9) associated with the Building 6 UST Area Focused Environmental Assessment (FEA) at the above referenced Site.

The four downgradient monitoring wells were sampled as per our June 5, 2008 Work Plan which was approved in a July 18, 2008 letter from NYSDEC to Delphi. The three monitoring wells associated with the Building 6 UST Area were sampled voluntarily by Delphi to confirm the results of the previous groundwater sampling in August 2008.

## **I. DOWNGRADIENT MONITORING**

### **BACKGROUND**

In late 2007, Delphi began an assessment of downgradient groundwater conditions on the eastern portion of the Site, north and south of the trichloroethylene (TCE) spill area (NYSDEC Site #932113). The purpose of the downgradient groundwater sampling was to assess if contaminated groundwater was migrating off-site at locations not previously investigated in the eastern portion of the Site.

The following is a summary of the downgradient groundwater work to date which is further described in detail later in this report.

- Fall 2007 – Five monitoring wells, designated MW-6-1, MW-6-2, MW-7-1, MW-7-2 and MW-7-3, were installed in November 2007 and sampled in December 2007.
- February 2008 – The above mentioned monitoring wells were sampled for a second time.



- April 2008 – Monitoring well MW-6-2 was resampled. A split sample was also collected by the New York State Department of Environmental Conservation (NYSDEC).
- Summer 2008 - Monitoring well MW-7-4 was installed in July 2008 at the request of NYSDEC. This well was sampled for the first time and wells MW-6-1, MW-6-2 and MW-7-2 were also resampled in August 2008.
- November 2008 – Monitoring wells MW-6-1, MW-6-2, MW-7-2 and MW-7-4 were resampled in November 2008 in conjunction with the monitored natural attenuation groundwater sampling associated with the trichloroethylene spill area.

## **GROUNDWATER SAMPLING EVENT**

### November 2007

On November 29 and 30, 2007, groundwater samples were collected from five downgradient monitoring wells (MW-6-1, MW-6-2, MW-7-1, MW-7-2 and MW-7-3) and submitted to Free-Col Laboratories (Free-Col) for analytical testing for volatile organic compounds (VOCs) via EPA Method 8260 Target Analyte List (TCL). Low-flow sampling methodologies were used to purge and collect the groundwater samples in general accordance with our work plan dated October 11, 2007. The attached table presents a summary of the November 2007 analytical results.

VOCs were detected in two of the five monitoring wells (MW-6-2 and MW-7-1). Trichloroethylene (TCE) was detected above method detection limits in the sample collected from MW-6-2 at a concentration of 25 parts per billion (ppb), which exceeds its respective Class GA<sup>1</sup> groundwater criteria of 5 ppb (see attached table).

Four VOCs; TCE (110 ppb), 1,2-dichloroethenes (total) (8 ppb), benzene (3 ppb) and toluene (7 ppb) were detected at a concentration above their method detection limits and above their respective NYSDEC groundwater criteria in the sample collected from MW-7-1.

No VOCs were detected above method detection limits in the groundwater samples analyzed from MW-6-1, MW-7-2 and MW-7-3.

The laboratory report and information on the monitoring wells (i.e., well logs, hydraulic conductivities, etc.) was provided in a letter report dated February 7, 2008.

---

<sup>1</sup> Division of Water Technical and Operational Guidance Series (1.1.1) "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" prepared by the New York State Department of Environmental Conservation, dated October 1993, revised 1998, ERRATA Sheet dated January 1999; and Addendum dated April 2000.

### February 2008

Due to the VOCs detected in monitoring wells MW-6-2 and MW-7-1, GZA resampled the five monitoring wells in February 2008. The results are summarized on the attached table. Low-flow sampling methodologies were used to purge and collect the groundwater samples. Water quality readings were not collected, but a minimum of 1.5 well volumes were purged after a constant head was established (MW-6-1, MW-6-2 and MW-7-3) or the well was purged dry (MW-7-1 and MW-7-2), prior to sample collection. Samples were submitted to Free-Col for VOC TCL analysis.



Trichloroethylene (TCE) was detected above method detection limits at one sampling location, MW-7-1, at a concentration of 56 ppb. No other VOCs were detected above method detection limits at this sampling location and no VOCs were detected above method detection limits in the groundwater samples analyzed from MW-6-1, MW-6-2, MW-7-2 and MW-7-3. However, the 7 day holding time for unpreserved groundwater samples was exceeded. NYSDEC requested that monitoring well MW-6-2 be resampled and a split sample be collected by NYSDEC for analysis by a laboratory of their choice (Test America in Buffalo, New York).

The laboratory report was provided in a letter report dated March 17, 2008.

### April 2008

Monitoring well MW-6-2 was resampled on April 15, 2008. In addition to the sample collected by GZA, NYSDEC collected a split sample. GZA's sample was submitted to Free-Col for VOC TCL analysis. NYSDEC submitted their sample to Test America for VOC TCL analysis. The results from both analytical laboratories are summarized on the attached table (Free-Col sample is identified as Delphi and the Test America sample is identified as NYSDEC).

#### *Free-Col Sample Results*

TCE was detected above method detection limits at a concentration of 4 ppb in the sample from MW-6-2, which is below its respective Class GA groundwater criteria of 5 ppb. No other VOCs were detected above method detection limits at this sampling location.

#### *Test America Sample Results*

TCE was detected above method detection limits at a concentration of 4.2 ppb in the NYSDEC split sample from MW-6-2. No other VOCs were detected above method detection limits at this sampling location.

The laboratory report was provided in a letter report dated May 2, 2008.

### Summer 2008

Groundwater monitoring well, MW-7-4 was installed as part of our additional downgradient groundwater condition assessment as requested by NYSDEC in their May 13, 2008 letter to Delphi. This 2-inch diameter bedrock monitoring well is located downgradient of MW-7-1 and south of MW-7-2. It was installed consistent with the methodologies used to install the other five downgradient wells as per our October 11, 2007 Work Plan<sup>2</sup>.



In August 2008, downgradient groundwater samples were collected from MW-6-1, MW-6-2, MW-7-2 and MW-7-4. Low-flow sampling methodologies consistent with those outlined in the Operations, Monitoring & Maintenance Plan in the Site Management Plan dated August 2007 were followed. The four groundwater samples collected were submitted to Free-Col Laboratories for analytical testing for VOCs via EPA Method 8260 TCL. The analytical results are summarized on the attached table.

No VOCs were detected above method detection limits in the four downgradient wells sampled as part of the August 2008 sampling event. It does not appear that impacted groundwater is migrating from the Delphi facility.

Delphi also conducted a review of documents and files to determine a potential source of the TCE contamination that was detected in monitoring well MW-6-2, located downgradient of Building 6. According to Delphi records, TCE was not used within Building 6. Also, there does not appear to be subsurface utilities in the vicinity of MW-6-2 which are coming from Building 6 which could act as a potential preferential pathway.

The laboratory report was provided in a letter report dated October 1, 2008.

### **DOWNGRADIENT GROUNDWATER SAMPLING – NOVEMBER 2008**

As part of NYSDEC's request in their May 13, 2008 letter to Delphi, four monitoring wells (MW-6-1, MW-6-2, MW-7-2 and MW-7-4) were resampled in November 2008 in conjunction with the monitored natural attenuation groundwater sampling associated with the TCE spill area.

Low-flow sampling methodologies consistent with previous sampling rounds were used. The four groundwater samples collected were submitted to Free-Col Laboratories for analytical testing for VOCs via EPA Method 8260 TCL. The attached table is a summary of the analytical results.

No VOCs were detected above method detection limits in the four downgradient wells sampled as part of the November 2008 sample round. This sample round completes the

---

<sup>2</sup> "Work Plan for Downgradient Monitoring Installation, Eastern portion of Delphi Lockport Facility, Lockport, New York" letter to Mr. Glenn May, NYSDEC, dated October 11, 2007.

NYSDEC required sampling of the downgradient locations. It does not appear that impacted groundwater is migrating from the Delphi facility and the sampling of the downgradient wells is no longer required.

The laboratory report for the November 2008 downgradient sampling event is included in Appendix B with the analytical data from the monitoring natural attenuation sampling from November 2008.



## **II. BUILDING 6 UST AREA**

### **BACKGROUND**

In 2006, Delphi completed a site-wide Current Conditions Summary and Field Investigation Report (Study) to identify areas of soil and/or groundwater contamination at the Lockport facility. The findings of the study included the identification of petroleum contamination in two wells (MW-6-F-1 and MW-6-F-5) located adjacent to the gasoline and diesel USTs at Building 6.

In 2008 Delphi completed a Focused Environmental Assessment (FEA) for the Building 6 UST Area to determine the extent of petroleum contamination. Three new monitoring wells (MW-6-F-7, MW-6-F-8 and MW-6-F-9) were installed in July 2008 and sampled in August 2008. No VOCs were detected in the new wells. Results of the FEA were reported to NYSDEC in a report dated October 1, 2008, revised January 13, 2009.

### **BUILDING 6 UST AREA GROUNDWATER SAMPLING – NOVEMBER 2008**

The three monitoring wells were resampled in November 2008 in conjunction with the monitored natural attenuation groundwater sampling associated for the TCE spill area. The purpose of this sampling event was to confirm the results of the previous groundwater sampling in August 2008.

Low-flow sampling methodologies were used to collect groundwater samples that were submitted to Free-Col Laboratories for VOCs analysis via EPA Method 8260 TCL.

No VOCs were detected above method detection limits in two of the three monitoring wells (MW-6-F-8 and MW-6-F-9). One compound, cis-1,2-dichloroethylene (2 ppb), was detected at a concentration below its respective NYSDEC groundwater standard of 5 ppb in MW-6-F-7.

Based on the results of the August 2008 and November 2008 sampling events, no additional sampling of these wells is planned.

Please do not hesitate to contact the undersigned if you have any questions or require any additional information.

Sincerely,

GZA GEOENVIRONMENTAL



A handwritten signature in blue ink that reads 'Cliff Boron'.

Christopher Boron  
Senior Project Manager

A handwritten signature in blue ink that reads 'Ernest R. Hanna for'.

Ernest R. Hanna, P.E.  
Principal

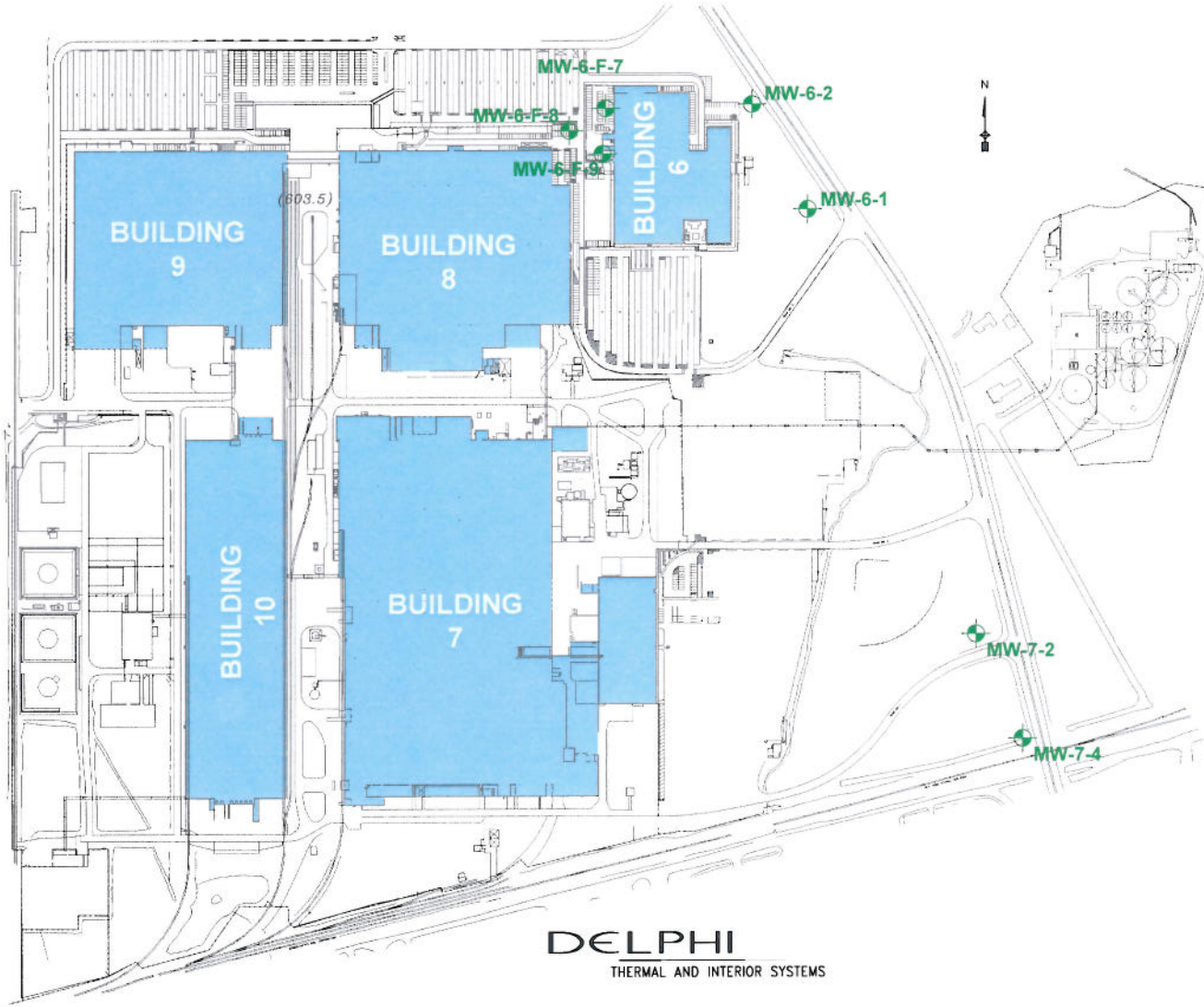
Attachments	Figure	Building 6 UST Area & Downgradient Monitoring Well Locations
	Table	Groundwater Analytical Testing Results Summary Table

Groundwater Analytical Testing Results Summary Table  
 Additional Downgradient Groundwater Monitoring Wells  
 Delphi Lockport Complex  
 Lockport, New York

Location	Sample Date	Volatile Organic Compounds			
		Benzene	1,2-Dichloroethenes (total)	Trichloroethylene	Toluene
	NYSDEC Class GA Criteria	1	5	5	5
MW-6-1	November 2007				
	February 2008				
	August 2008				
	November 2008				
MW-6-2	November 2007			<b>25</b>	
	February 2008				
	April 2008 - Delphi			4	
	April 2008 - NYSDEC			4.2	
	August 2008				
	November 2008				
MW-7-1	November 2007	<b>3</b>	<b>8</b>	<b>110</b>	<b>7</b>
	February 2008			<b>56</b>	
MW-7-2	November 2007				
	February 2008				
	August 2008				
	November 2008				
MW-7-3	November 2007				
	February 2008				
MW-7-4	August 2008				
	November 2008				

Notes:

1. Compounds detected in one or more samples are presented on this table.
2. Analytical testing completed by Free-Col Laboratory except the NYSDEC April 2008 split sample which was tested by Test America. Samples were analyzed for volatile organic compounds (VOCs) via EPA Method 8260 Target Compound List (TCL), only.
3. NYSDEC Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), June 1998.
4. ug/L = part per billion (ppb).
5. Blank indicates compound was not detected.
6. **BOLD** values exceeding guidance criteria.




**LEGEND:**

 MW-7-2 APPROXIMATE LOCATION AND DESIGNATION OF MONITORING WELLS.

**NOTES:**

1. BASE MAP ADAPTED FROM A DRAWING PROVIDED BY DELPHI THERMAL AND INTERIOR SYSTEMS SEPT. 2007.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

<p><b>DELPHI AUTOMOTIVE SYSTEMS</b>                  DELPHI LOCKPORT FACILITY                  200 UPPER MOUNTAIN ROAD, LOCKPORT, NEW YORK                  BUILDING 6 JUST AREA DOWNGRADE WELL                  SAMPLING NOVEMBER 2008                  MONITORING WELL                  LOCATION PLAN</p>	<p>DRAWN BY: MDK                  DATE: APRIL 2009</p>
	<p>APPROXIMATE SCALE IN FEET</p> 
<p>PROJECT No.  <b>21.0056192.10</b></p>	<p>FIGURE No.</p>



**APPENDIX B**  
**FREE COL LABORATORIES ANALYTICAL REPORTS**



# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011833

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 4/2008  
Time Received: 16:15  
Delivered By: Field Services

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

Sample ID: 2008:0011833-1 Client's Sample ID: MW-7-2  
Date Sampled: 11/ 3/2008 Time Sampled: 13:00 Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<u>Organics</u>						
Chloromethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,1,1-Trichloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B



# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011833

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine

Date Received 11/ 4/2008

Contact Name: Mr. Rick Eisenman

Time Received: 16:15

Delivered By: Field Services

100 Lexington Ave.

Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

Sample ID: 2008:0011833-1 Client's Sample ID: MW-7-2  
Date Sampled: 11/ 3/2008 Time Sampled: 13:00 Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics (Continued)

Toluene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
Xylenes (total)	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	19:02	Lindquist	SW-846 8260B

Sample ID: 2008:0011833-2 Client's Sample ID: MW-6-1  
Date Sampled: 11/ 3/2008 Time Sampled: 15:00 Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics

Chloromethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B



# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011833

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 4/2008  
Time Received: 16:15  
Delivered By: Field Services

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

Sample ID: 2008:0011833-2 Client's Sample ID: MW-6-1  
Date Sampled: 11/ 3/2008 Time Sampled: 15:00 Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics (Continued)

1,1,1-Trichloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Toluene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
Xylenes (total)	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	21:02	Lindquist	SW-846 8260B



# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011833

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 4/2008  
Time Received: 16:15  
Delivered By: Field Services

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

Sample ID: 2008:0011833-3 Client's Sample ID: MW-6-2  
Date Sampled: 11/ 3/2008 Time Sampled: 17:00 Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics

Chloromethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,1,1-Trichloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B



**FREE-COL LABORATORIES**  
 11618 COTTON ROAD  
 MEADVILLE, PENNSYLVANIA 16335  
 PHONE: (814) 724-6242  
 FAX: (814) 333-1466  
 EMAIL: service@freecol.com

Accredited Lab ID#  
 Free-Col: 20-00073  
 Modern Erie: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011833**

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
 Contact Name: Mr. Rick Eisenman

Date Received: 11/ 4/2008  
 Time Received: 16:15  
 Delivered By: Field Services

100 Lexington Ave.  
 Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

**Sample ID: 2008:0011833-3**      **Client's Sample ID: MW-6-2**  
**Date Sampled: 11/ 3/2008**    **Time Sampled: 17:00**      **Date Received: 11/ 4/2008**

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<b><u>Organics (Continued)</u></b>						
Toluene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
Xylenes (total)	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	21:42	Lindquist	SW-846 8260B

**Sample ID: 2008:0011833-4**      **Client's Sample ID: MW-7-4**  
**Date Sampled: 11/ 3/2008**    **Time Sampled: 17:30**      **Date Received: 11/ 4/2008**

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<b><u>Organics</u></b>						
Chloromethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B



# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011833

8 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine

Date Received 11/ 4/2008

Contact Name: Mr. Rick Eisenman

Time Received: 16:15

Delivered By: Field Services

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: 21.0056192.10

Printed on 04/20/2009 at 12:54PM

Sample ID: 2008:0011833-4

Client's Sample ID: MW-7-4

Date Sampled: 11/ 3/2008 Time Sampled: 17:30

Date Received: 11/ 4/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics (Continued)

1,1,1-Trichloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Toluene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
Xylenes (total)	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/12/08	22:22	Lindquist	SW-846 8260B

# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue  
Rochester, NY 14608  
(585) 647-2530 • (800) 724-1997  
FAX: (585) 647-3311

FREE COL LAB

## CHAIN OF CUSTODY

REPORT TO: **INVOICE TO:**

COMPANY: **GZA** LAB PROJECT #: \_\_\_\_\_ CLIENT PROJECT #: \_\_\_\_\_

ADDRESS: **535 Washington St** ADDRESS: \_\_\_\_\_

CITY: **Buffalo** STATE: **NY** CITY: \_\_\_\_\_ STATE: \_\_\_\_\_

PHONE: **(716) 685-2300** FAX: **685-3629** PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

ATTN: **CHRIS BOREN** ATTN: \_\_\_\_\_

PROJECT NAME/SITE NAME: **Delphi Thermal Systems**

COMMENTS: **Project # 21.0056192.10**

TURNAROUND TIME: (WORKING DAYS)  1  2  3  4  5

QUOTE #: \_\_\_\_\_

OTHER: \_\_\_\_\_

DATE	TIME	COMPOSITE	GRAAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBERS	REMARKS	REQUESTED ANALYSIS	PARADIGM LAB SAMPLE NUMBER
1/13/08	13:00			MW-7-2	GW	3	see remarks		
2/13/08	15:00			MW-6-1	GW	3	see remarks		
3/13/08	17:00			MW-6-2	GW	3	see remarks		
4/13/08	17:30			MW-7-4	GW	3	see remarks		
5/14/08	9:15			MW-15	GW	14	see remarks		
6/14/08	10:45			MW-11	GW	14	see remarks		
7/14/08	12:00			MW-DUP5	GW	14	see remarks		
8/14/08	13:00			MW-12	GW	14	see remarks		
9									
10									

REMARKS: Boxes checked "Numbered Attention" Require Following Analysis:  
Methane  
Alkalinity  
Chloride  
Ammonia  
Nitrate  
Nitrite  
Sulfate  
Sulfide  
Iron  
Magnesium  
Mercurium  
Potassium  
Sodium  
Calcium

**\*\*LAB USE ONLY BELOW THIS LINE\*\***

Sample Condition: Per NELAC/E LAP 2107241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	Y <input type="checkbox"/> N <input type="checkbox"/>
Preservation:	Y <input type="checkbox"/> N <input type="checkbox"/>
Holding Time:	Y <input type="checkbox"/> N <input type="checkbox"/>
Temperature:	Y <input type="checkbox"/> N <input type="checkbox"/>

Comments: \_\_\_\_\_

Comments: \_\_\_\_\_

Comments: \_\_\_\_\_

Comments: \_\_\_\_\_

Sampled By: **John Davide** Date/Time: **11/4/08 13:30**

Witnessed By: **[Signature]** Date/Time: **11/4/08 13:30**

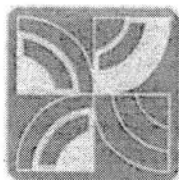
Received By: **[Signature]** Date/Time: **11-4-08 13:30**

Received @ Lab By: **[Signature]** Date/Time: **11.4.08**

Total Cost: \_\_\_\_\_

P.I.F. \_\_\_\_\_





# FREE-COL LABORATORIES

11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Eric: 25-03459

## Certificate Of Analysis

Delivery Group ID: 2008:0011918

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine

Date Received 11/ 6/2008

Contact Name: Mr. Rick Eisenman

Time Received: 09:45

Delivered By: UPS

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: Delphi 21.0056196.10

Printed on 11/26/2008 at 10:17AM

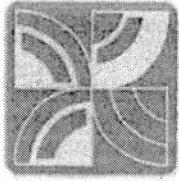
Sample ID: 2008:0011918-1

Client's Sample ID: MW-6-F-9

Date Sampled: 11/ 5/2008 Time Sampled: 09:30

Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<u>Organics</u>						
Chloromethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0040	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,1,1-Trichloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0040	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B



**FREE-COL LABORATORIES**  
 11618 COTTON ROAD  
 MEADVILLE, PENNSYLVANIA 16335  
 PHONE: (814) 724-6242  
 FAX: (814) 333-1466  
 EMAIL: service@freecol.com

Accredited Lab ID#  
 Free-Col: 20-00073  
 Modern Eric: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011918**

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
 Contact Name: Mr. Rick Eisenman

Date Received 11/ 6/2008  
 Time Received: 09:45  
 Delivered By: UPS

100 Lexington Ave.  
 Rochester NY 14606-2810

P.O. 460016825

Project Name: Delphi 21.0056196.10

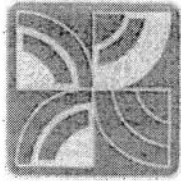
Printed on 11/26/2008 at 10:17AM

Sample ID: 2008:0011918-1 Client's Sample ID: MW-6-F-9  
 Date Sampled: 11/ 5/2008 Time Sampled: 09:30 Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<u>Organics (Continued)</u>						
Toluene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
Xylenes (total)	<0.0060	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/13/08	16:48	Lindquist	SW-846 8260B

Sample ID: 2008:0011918-2 Client's Sample ID: MW-6-F-8  
 Date Sampled: 11/ 5/2008 Time Sampled: 12:30 Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<u>Organics</u>						
Chloromethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	<0.0040	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B



**FREE-COL LABORATORIES**  
11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Eric: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011918**

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 6/2008  
Time Received: 09:45  
Delivered By: UPS

100 Lexington Ave.  
Rochester NY 14606-2810

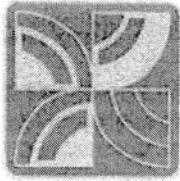
P.O. 460016825

Project Name: Delphi 21.0056196.10

Printed on 11/26/2008 at 10:17AM

**Sample ID:** 2008:0011918-2      **Client's Sample ID:** MW-6-F-8  
**Date Sampled:** 11/ 5/2008      **Time Sampled:** 12:30      **Date Received:** 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<b><u>Organics (Continued)</u></b>						
1,1,1-Trichloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0040	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Toluene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
Xylenes (total)	<0.0060	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/13/08	17:28	Lindquist	SW-846 8260B



**FREE-COL LABORATORIES**  
11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011918**

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 6/2008  
Time Received: 09:45  
Delivered By: UPS

100 Lexington Ave.  
Rochester NY 14606-2810

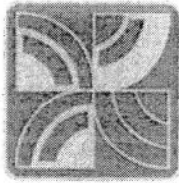
P.O. 460016825

Project Name: Delphi 21.0056196.10

Printed on 11/26/2008 at 10:17AM

Sample ID: 2008:0011918-3 Client's Sample ID: MW-6-F-7  
Date Sampled: 11/ 5/2008 Time Sampled: 13:00 Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<u>Organics</u>						
Chloromethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Bromomethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Vinyl Chloride	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Chloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Methylene chloride	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Acetone	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Carbon Disulfide	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,1-Dichloroethene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,1-Dichloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,2-Dichloroethenes (Total)	0.0024	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Chloroform	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,2-Dichloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
2-Butanone	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,1,1-Trichloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Carbon Tetrachloride	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Vinyl Acetate	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Bromodichloromethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,1,2,2-Tetrachloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,2-Dichloropropane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
trans-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Trichloroethene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Dibromochloromethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
1,1,2-Trichloroethane	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Benzene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
cis-1,3-Dichloropropene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
2-Chloroethylvinylether	<0.0040	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Bromoform	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
2-Hexanone	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
4-Methyl-2-Pentanone (MIBK)	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Tetrachloroethene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B



**FREE-COL LABORATORIES**  
11618 COTTON ROAD  
MEADVILLE, PENNSYLVANIA 16335  
PHONE: (814) 724-6242  
FAX: (814) 333-1466  
EMAIL: service@freecol.com

Accredited Lab ID#  
Free-Col: 20-00073  
Modern Erie: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011918**

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
Contact Name: Mr. Rick Eisenman

Date Received 11/ 6/2008  
Time Received: 09:45  
Delivered By: UPS

100 Lexington Ave.  
Rochester NY 14606-2810

P.O. 460016825

Project Name: Delphi 21.0056196.10

Printed on 11/26/2008 at 10:17AM

**Sample ID:** 2008:0011918-3      **Client's Sample ID:** MW-6-F-7  
**Date Sampled:** 11/ 5/2008      **Time Sampled:** 13:00      **Date Received:** 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Organics (Continued)

Toluene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Chlorobenzene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Ethylbenzene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Styrene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
Xylenes (total)	<0.0060	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
cis-1,2-Dichloroethene	0.0024	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B
trans-1,2-Dichloroethene	<0.0020	mg/L	11/13/08	18:08	Lindquist	SW-846 8260B

**Sample ID:** 2008:0011918-4      **Client's Sample ID:** MW-Split  
**Date Sampled:** 11/ 4/2008      **Time Sampled:** 15:00      **Date Received:** 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
---------	--------	-------	---------------	------------	---------	---------------

### Prep Group

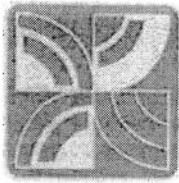
Prep: 3005A Met Total Rec			11/13/08	18:45	Kozakovsky	SW-846 3005A
---------------------------	--	--	----------	-------	------------	--------------

### Organics

cis-1,2-Dichloroethylene	0.0078	mg/L	11/13/08	18:48	Lindquist	SW-846 8260B
trans-1,2-Dichloroethylene	<0.0020	mg/L	11/13/08	18:48	Lindquist	SW-846 8260B
Methane	0.14	mg/L	11/14/08	07:53	Williams	In House
Tetrachloroethylene	<0.0020	mg/L	11/13/08	18:48	Lindquist	SW-846 8260B
Trichloroethylene	<0.0020	mg/L	11/13/08	18:48	Lindquist	SW-846 8260B
Vinyl chloride	0.0033	mg/L	11/13/08	18:48	Lindquist	SW-846 8260B

### Metals

Calcium ( Ca )	320	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B
Iron ( Fe )	0.39	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B
Magnesium ( Mg )	138	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B
Manganese ( Mn )	0.28	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B



**FREE-COL LABORATORIES**  
 11618 COTTON ROAD  
 MEADVILLE, PENNSYLVANIA 16335  
 PHONE: (814) 724-6242  
 FAX: (814) 333-1466  
 EMAIL: service@freecol.com

Accredited Lab ID#  
 Free-Col: 20-00073  
 Modern Erie: 25-03459

## Certificate Of Analysis

**Delivery Group ID: 2008:0011918**

6 Sample(s) are included in this Delivery Group.

Company Name: Delphi Energy & Engine  
 Contact Name: Mr. Rick Eisenman

Date Received 11/ 6/2008  
 Time Received: 09:45  
 Delivered By: UPS

100 Lexington Ave.  
 Rochester NY 14606-2810

P.O. 460016825

Project Name: Delphi 21.0056196.10

Printed on 11/26/2008 at 10:17AM

Sample ID: 2008:0011918-4 Client's Sample ID: MW-Split  
 Date Sampled: 11/ 4/2008 Time Sampled: 15:00 Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<b>Metals (Continued)</b>						
Potassium ( K )	13.5	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B
Sodium ( Na )	1010	mg/L	11/14/08	20:47	Kozakovsky	SW-846 6010B
<b>General Chemistry</b>						
Alkalinity (as CaCO3)	340	mg/L	11/10/08	15:30	Bleicher	SM 2320 B
Total Organic Carbon	2.4	mg/L	11/10/08	21:32	Lindquist	SW-846 9060
Chloride	2100	mg/L	11/11/08	09:00	Parker	EPA 325.3
Nitrogen, Ammonia	0.39	mg/L	11/14/08	06:00	Semroc	EPA 350.2
Nitrogen, Nitrate	<0.05	mg/L	11/10/08	16:30	Bleicher	EPA 353.2
Nitrogen, Nitrite	<0.05	mg/L	11/06/08	13:40	Macko	EPA 353.2
Sulfate	80	mg/L	11/11/08	11:00	Semroc	SW-846 9038
Sulfide, Direct	<0.1	mg/L	11/07/08	12:15	Bleicher	EPA 376.1

Metal analyses were performed by Modern Industries Inc., Erie, PA.

Sample ID: 2008:0011918-5 Client's Sample ID: MW-7  
 Date Sampled: 11/ 5/2008 Time Sampled: 08:00 Date Received: 11/ 6/2008

Analyte	Result	Units	Date Analyzed	Start Time	Analyst	Method Source
<b>Prep Group</b>						
Prep: 3005A Met Total Rec			11/13/08	18:45	Kozakovsky	SW-846 3005A
<b>Organics</b>						
cis-1,2-Dichloroethylene	70	mg/L	11/18/08	18:46	Lindquist	SW-846 8260B
trans-1,2-Dichloroethylene	<0.20	mg/L	11/18/08	18:46	Lindquist	SW-846 8260B
Methane	0.11	mg/L	11/14/08	07:53	Williams	In House
Tetrachloroethylene	<0.2	mg/L	11/18/08	18:46	Lindquist	SW-846 8260B
Trichloroethylene	1.1	mg/L	11/18/08	18:46	Lindquist	SW-846 8260B
Vinyl chloride	2.6	mg/L	11/18/08	18:46	Lindquist	SW-846 8260B

# CHAIN OF CUSTODY RECORD

Page 1 of 1

**FREE-COL LABORATORIES, a Division of Modern Ind.**

11618 COTTON ROAD 814 724 - 6242  
MEADVILLE, PA 16335 814 333 - 1466 Fax

Website: www.modernind.com

PROJECT NAME / NUMBER: Delphi 21.0056192.10

SAMPLER'S NAME / DATE: Joe Davide / 11/5/08

SAMPLE RANGE:

1. CLIENT INFORMATION		2. SAMPLE REPORTING INFORMATION		3. ANALYSIS REQUESTED/COMMENTS (If composite, please use inclusive dates and times.)	
COMPANY: <u>CRZA</u> CONTACT: <u>Chris Bora</u> ADDRESS: <u>535 Washington St</u> CITY: <u>Buffalo NY</u> STATE: <u>NY</u> Zip Code: <u>14203</u> Phone: <u>(716) 685-2300</u> Fax: <u>685-3629</u> E-MAIL: <u>Christopher.bora@crza.com</u> PURCHASE ORDER NUMBER:		Check all that apply: NORMAL <input type="checkbox"/> Wastewater: _____ Rush (Specify) <input type="checkbox"/> Frequency: _____ QA/QC <input type="checkbox"/> Monitoring Wells: _____ Due Date: _____ Solid Waste: _____ E-mail Data <input type="checkbox"/> Frequency: _____ Non-Compliance <input type="checkbox"/> Other: _____ Compliance <input type="checkbox"/> Frequency: _____		DEF drinking water compliance provide the following: DRINKING WATER: PWSID #: Location: Entry Point #: Sampling Frequency (Circle One): Quarterly/Monthly/Annual Check Sample: Yes / No	
DATE	TIME	SAMPLE IDENTIFICATION	FOR FREE-COL USE ONLY	CRAB/COMP	ANALYSIS REQUESTED/COMMENTS
11/1/08	15:00	MW- <del>7</del> SPLIT	4	GW	See Note
11/5/08	8:00	MW-7	5		See Note
11/5/08	9:30	MW-6-F-9	1		VOC: TCL
11/5/08	12:30	MW-6-F-8	2		VOC: TCL
11/5/08	13:00	MW-6-F-7	3		VOC: TCL
11/5/08	14:00	MW-13	6		See Note
Note: MW SPLIT MW-7 + MW-13 Get the following Analysis: Methane: SW-846, 8015 B Modified Alkalinity: SM 2320 B Chloride: EPA 325.3 Ammonia: EPA 350.2 Nitrate: EPA 353.2 Nitrite: EPA 353.2 Sulfate: SW-846, 9038 Sulfide: EPA 376.1 Iron: SW-846, 6010B Magnesium: SW-846, 6010B Manganese: SW-846, 6010B Potassium: SW-846, 6010B Sodium: SW-846, 6010B Calcium: SW-846, 6010B					
DATE RECEIVED		SAMPLE TRACEABILITY		USE BY LABORATORY ONLY	
11/5/08	<u>Signature</u>	SIGNATURE	ORGANIZATION	DATE RELINQUISHED	Time
11/6	<u>Signature</u>	<u>CRZA</u>	<u>CRZA</u>	11/5/08	11/6 9:45
11/6	<u>Signature</u>	<u>Free Col Laboratories</u>	<u>UPS</u>	11/5/08	YES
11/6	<u>Signature</u>	<u>Free Col Laboratories</u>	<u>Free Col Laboratories</u>	11/6	NO
11/6	<u>Signature</u>	<u>Free Col Laboratories</u>	<u>Free Col Laboratories</u>	11/6/08	Completed
Date Received		Signature		Time	
Samples received at lab		Refrigerated upon receipt?		YES	
Means of delivery to lab		Sample cooler temp. upon receipt		(deg. C) <u>order</u>	
Sample check in started		Sample check in completed		11-6 11-6-08	
Analyst		Date Run			
Reviewed by		Date			
Worksheet Number					

ZAM 4.257) m.ttl 1511 D mail - 1

**APPENDIX C**  
**MONITORING WELL OBSERVATION &**  
**GROUNDWATER SAMPLING LOGS**



**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-6-1  
 Time In: 13:30  
 Time Out: 15:15

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerating at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.03  
 Length of Water Column: 13.82  
 Depth of Well (from Log): 18.85  
 Length of Time Pumping: 1 hour 11 min  
 Total Volume Removed: 4.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

**PARAMETER STABILITY**

pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

**SAMPLING INFORMATION**

Sample ID:	MW-6-1
Sample Time:	15:00
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	6
Time:	13:54	14:02	14:09	14:20	14:36	14:54

Cumulative Volume Purged	0 gals	.5 gals	1 gals	1.5 gals	2.5 gals	3.5 gals	NOTES
Depth to Water	5.03	6.35	6.35	6.41	6.53	6.58	
pH	6.78	6.77	6.77	6.76	6.75	6.74	
Conductance (mS/cm)	4.076	4.107	4.11	4.132	4.176	4.183	
Turbidity (NTUs)	51.1	6.9	17	13.2	4.3	1	
Temperature (°C)	14.12	14.27	14.22	14.23	14.12	14.07	
DO (mg/L)	-11.76	0.85	0.69	1.35	3.2	3.81	
ORP (mV)	-52.9	-61.6	-60.4	-52.3	-25.4	-21.1	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-6-1  
 Time In: 13:30  
 Time Out: 15:15

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.03  
 Length of Water Column: 13.82  
 Depth of Well (from Log): 18.85  
 Length of Time Pumping: 1 hour 11 min  
 Total Volume Removed: 4.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-1
Sample Time:	15:00
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	7					
Time:	15:05					

Cumulative Volume Purged

4.5 gals

NOTES

Depth to Water	6.62					
pH	6.74					
Conductance (mS/cm)	4.183					
Turbidity (NTUs)	-0.8					
Temperature (°C)	14.07					
DO (mg/L)	3.94					
ORP (mV)	-23.5					

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-6-2  
 Time in: 15:30  
 Time Out: 17:10

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.61  
 Length of Water Column: 20.06  
 Depth of Well (from Log): 26.21  
 Length of Time Pumping: 1 hour 23 min  
 Total Volume Removed: 4.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-2
Sample Time:	17:00
# of Sample C	15
Duplicate Sarr	No
Sample Analy:	Natural Attenuation

Reading:	1	2	3	4	5	6
Time:	15:37	15:54	16:05	16:06	16:31	16:46

Cumulative Volume Purged	0 gals	1 gals	1.5 gals	2 gals	3 gals	4 gals	NOTES
Depth to Water	5.61	6.18	6.2	6.2	6.21	6.21	
pH	6.77	6.81	6.83	6.84	6.84	6.85	
Conductance (mS/cm)	6.404	6.234	6.096	6.011	5.971	5.943	
Turbidity (NTUs)	2.6	-2.8	-3.9	-4.6	-4.4	-4.7	
Temperature (°C)	13.8	13.69	13.61	13.56	13.41	13.4	
DO (mg/L)	1.53	0.21	0.02	0.2	1.16	1.08	
ORP (mV)	48.9	33.8	32.5	34.6	37.1	41.3	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-6-2  
 Time in: 15:30  
 Time Out: 17:10

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.61  
 Length of Water Column: 20.06  
 Depth of Well (from Log): 26.21  
 Length of Time Pumping: 1 hour 23 min  
 Total Volume Removed: 4.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-2
Sample Time:	17:00
# of Sample C	15
Duplicate Sarr	No
Sample Analy:	Natural Attenuation

Reading:	7					
Time:	17:00					

Cumulative Volume Purged

4.5 gals

NOTES

Depth to Water	6.21					
pH	686					
Conductance (mS/cm)	5.93					
Turbidity (NTUs)	-4.9					
Temperature (°C)	13.38					
DO (mg/L)	0.93					
ORP (mV)	45					

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-7-2  
 Time in: 10:10  
 Time Out: 13:50

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 7.23  
 Length of Water Column: 14.47  
 Depth of Well (from Log): 21.7  
 Length of Time Pumping: 3 hour 25 min  
 Total Volume Removed: 6.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-7-2
Sample Time:	13:00
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	6
Time:	10:25	10:40	10:49	11:05	11:23	12:05

Cumulative Volume Purged	0 gals	0.5 gals	1 gals	1.25 gals	2 gals	3 gals	NOTES
Depth to Water	7.23	11.22	12.12	13	14.3	15.82	
pH	7.18	7.14	7.13	7.14	7.22	7.15	
Conductance (mS/cm)	2.852	2.751	2.571	2.137	1.759	1.975	
Turbidity (NTUs)	-0.9	-2	-3.5	-2.2	-2.3	2.3	
Temperature (°C)	13.72	13.57	13.6	13.48	13.39	13.51	
DO (mg/L)	3.41	0.86	0.84	1.02	2.96	2.11	
ORP (mV)	2.7	-8.7	-11.1	-1.3	19.1	28.2	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-7-2  
 Time in: 10:10  
 Time Out: 13:50

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 7.23  
 Length of Water Column: 14.47  
 Depth of Well (from Log): 21.7  
 Length of Time Pumping: 3 hour 25 min  
 Total Volume Removed: 6.5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-7-2
Sample Time:	13:00
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	7	8	9			
Time:	13:00	13:28	13:50			

Cumulative Volume Purged	.5 gals	5.5 gals	6.5 gals				NOTES
Depth to Water	16.31	17.68	19				
pH	7.12	7.13	7.16				
Conductance (mS/cm)	2.45	2.347	2.261				
Turbidity (NTUs)	7.2	4.7	6.1				
Temperature (°C)	13.66	13.69	13.7				
DO (mg/L)	1.16	1.79	2.03				
ORP (mV)	5.9	7.9	11.1				

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/3/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Cloudy 55F

Well ID: MW-7-4  
 Time in: 9:00  
 Time Out: 9:40

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 12.15  
 Length of Water Column: 6.85  
 Depth of Well (from Log): 19  
 Length of Time Pumping: 35 min  
 Total Volume Removed: 2 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: Yes

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Tempurature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-7-2
Sample Time:	17:30
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	
Time:	9:05	9:16	9:28	9:40	17:25	

Cumulative Volume Purged	0 gals	1 gals	1.5 gals	2 gals	Recharge	NOTES
Depth to Water	12.15	17.23	18.83	21.5	17.4	
pH	7.02	7.05	7	7.01		
Conductance (mS/cm)	4.072	4.002	3.944	3.997		
Turbidity (NTUs)	206.3	9.9	4.1	-2.2		
Temperature (°C)	14.1	14.17	14.07	14.01		
DO (mg/L)	38.1	2.5	1.72	1.37		
ORP (mV)	-23.9	47.9	70.6	22.1		

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/5/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Sunny 65F

Well ID: MW-6-F-7  
 Time in: 10:10  
 Time Out: 10:55

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 25 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.12  
 Length of Water Column: 14.47  
 Depth of Well (from Log): 11.18  
 Length of Time Pumping: 16.3  
 Total Volume Removed: 5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: Yes

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-F-7
Sample Time:	13:00
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	6
Time:	10:15	10:23	10:30	10:30	10:41	10:46

Cumulative Volume Purged	0 gals	0.5 gals	1 gals	2 gals	3 gals	4 gals	NOTES
Depth to Water	6.5	8.2	9	9.75	10.81	12.63	
pH	7.11	7.08	7.07	7.05	7.01	7.01	
Conductance (mS/cm)	7.395	7.277	6.651	6612	7.528	7.861	
Turbidity (NTUs)	16.1	10.2	4.4	8	31.1	120.1	
Temperature (°C)	17.12	17.25	17.08	17.15	17.15	17.22	
DO (mg/L)	-0.8	-0.29	-0.16	-0.13	0.1	0.27	
ORP (mV)	-120.9	-110.9	-103.7	-101.2	-97.6	-101.6	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems



**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/5/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Sunny 65F

Well ID: MW-6-F-7  
 Time in: 10:10  
 Time Out: 10:55

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 25 ppm

**WELL WATER INFORMATION**

Depth of Water: 5.12  
 Length of Water Column: 14.47  
 Depth of Well (from Log): 11.18  
 Length of Time Pumping: 16.3  
 Total Volume Removed: 5 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: Yes

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-F-7
Sample Time:	13:00
# of Sample C	3
Duplicate Sam	No
Sample Analy:	VOC-TCL

Reading:	7	8				
Time:	10:51	12:25				

Cumulative Volume Purged	5 gals	Recharge					NOTES
Depth to Water	14.67	5.28					
pH	6.99						
Conductance (mS/cm)	7.748						
Turbidity (NTUs)	473.8						
Temperature (°C)	17.22						
DO (mg/L)	-0.83						
ORP (mV)	-102.3						

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/5/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Sunny 65F

Well ID: MW-6-F-8  
 Time in: 11:10  
 Time Out: 12:40

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 4 ppm

**WELL WATER INFORMATION**

Depth of Water: 3.31  
 Length of Water Column: 12.1  
 Depth of Well (from Log): 15.4  
 Length of Time Pumping: 1 hour  
 Total Volume Removed: 3 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-F-8
Sample Time:	12:30
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	6
Time:	11:18	11:28	11:37	11:56	12:07	12:19

Cumulative Volume Purged	0 gals	.5 gals	1 gals	2 gals	2.5 gals	3 gals	NOTES
Depth to Water	3.63	3.64	3.62	3.61	3.64	3.63	
pH	6.48	6.47	6.43	6.4	6.43	6.45	
Conductance (mS/cm)	11.81	10.45	9.505	10.22	10.43	10.48	
Turbidity (NTUs)	37.5	48	19.1	7.2	2.5	2.4	
Temperature (°C)	17.13	17.33	17.05	16.74	16.72	16.77	
DO (mg/L)	-3.79	-1.26	-0.48	-0.27	-0.14	-0.07	
ORP (mV)	6.9	14.5	25.6	38.9	36.7	33.3	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/5/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Sunny 65F

Well ID: MW-6-F-9  
 Time in: 8:40  
 Time Out: 10:00

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacked: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 4.52  
 Length of Water Column: 9.98  
 Depth of Well (from Log): 14.5  
 Length of Time Pumping: 1 hour 5min  
 Total Volume Removed: 3 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-F-9
Sample Time:	9:30
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	1	2	3	4	5	6
Time:	8:55	0:04	9:15	9:26	9:39	9:50

Cumulative Volume Purged	0 gals	.5 gals	1 gals	1.5 gals	2 gals	2.5 gals	NOTES
Depth to Water	5.9	5.72	5.75	5.8	5.79	5.8	
pH	6.93	6.93	6.9	6.91	6.9	6.89	
Conductance (mS/cm)	9.688	9.71	9.749	9.972	10.23	10.55	
Turbidity (NTUs)	70.3	54.8	47.2	31.4	13.9	9.8	
Temperature (°C)	16.95	16.6	16.84	17.19	17.37	17.45	
DO (mg/L)	-1.44	-1.04	-1.11	-0.69	-0.72	-0.54	
ORP (mV)	-162.9	-185	-196.9	-227	-231.3	-211.7	

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems

**MONITORING WELL OBSERVATIONS & GROUNDWATER SAMPLING LOG**

Site: Delphi Thermal Systems  
 Date: 11/5/2008  
 Sampling Personnel: J. Davide  
 Weather Conditions: Sunny 65F

Well ID: MW-6-F-9  
 Time in: 8:40  
 Time Out: 10:00

**WELL CONDITION**

Well Locked: Yes  
 J-Plug Intacted: Yes  
 Does well appear to be functioning properly: Yes  
 Condition of Surface Seal: Good  
 Condition of Riser Pipe: Good  
 PID Rerading at Top of Well: 0 ppm

**WELL WATER INFORMATION**

Depth of Water: 4.52  
 Length of Water Column: 9.98  
 Depth of Well (from Log): 14.5  
 Length of Time Pumping: 1 hour 5min  
 Total Volume Removed: 3 gallons  
 Well Purge Pumping Rate:  
 Sheen Observed: No  
 DNAPL Observed: No  
 Did Well Go Dry: No

PARAMETER STABILITY	
pH	+/- 0.1
Conductivity	+/- 3%
Temperature	+/- 10%
Turbidity	+/- 10%
ORP	+/- 10 mV
DO	+/- 10%

SAMPLING INFORMATION	
Sample ID:	MW-6-F-9
Sample Time:	9:30
# of Sample C	3
Duplicate Sarr	No
Sample Analy:	VOC-TCL

Reading:	7					
Time:	10:00					

	Cumulative Volume Purged	NOTES				
	3 gals					
Depth to Water	5.81					
pH	6.88					
Conductance (mS/cm)	10.61					
Turbidity (NTUs)	7.5					
Temperature (°C)	17.59					
DO (mg/L)	-0.48					
ORP (mV)	-221.3					

Water Quality Meter: YSI 6820 MP Sonde 2.85"  
 Peristaltic Pump: GeoPump  
 Tubing Type: Polyethylene tubing

Miscellaneous Observations/Notes/Problems