

**PROGRESS REPORT NO. 18  
REMEDIAL INVESTIGATION  
DELPHI FACILITY  
1000 LEXINGTON AVENUE  
ROCHESTER, NEW YORK  
Registry Site No. 8-28-064  
EPA ID No. NYD002215234**

**by**

**Haley & Aldrich of New York  
Rochester, New York**

**for**

**Delphi Corporation  
Rochester, New York**

**File No. 70014-054  
April 2007**

**HALEY &  
ALDRICH**



10 April 2007  
File No. 70014-054

New York State Department of Environmental Conservation  
Region 8 Division of Environmental Remediation  
6274 East Avon-Lima Road  
Avon, New York 14414-9519

Attention: Kelly C. Cloyd, Ph.D.  
Engineering Geologist II

Subject: Progress Report No. 18  
Delphi Rochester, Site # 828064  
1000 Lexington Avenue  
Rochester, New York  
Registry Site No. 8-28-064, EPA ID No. NYD002215234

Ladies and Gentlemen:

Please find enclosed two copies of Remedial Investigation (RI) Progress Report No. 18 for NYSDEC Registry Site No. 8-28-064 which is the Delphi Corporation (Delphi) facility located at 1000 Lexington Avenue in the City of Rochester, Monroe County, New York.

This Progress Report is submitted on behalf of Delphi in accordance with the terms of an Order On Consent between NYSDEC and Delphi ("RI/FS Order," Index # B8-0531-98-06).

Remedial Investigation (RI) activities performed during the period 1 January through 31 March 2007 included:

- continued operation of Interim Remedial Measure (IRM) including the groundwater migration control systems,
- validation of analysis results for soil samples collected during the execution of the IRM implemented within the western portion of the Stoddard Tank Farm,
- responses to comments received from the Department on 27 November 2006 concerning the DRAFT Remedial Investigation (RI) Report, (Haley & Aldrich, 2005),
- preparation and submittal of RI Work Plan Amendment No.5 for Additional Offsite Investigation Activities,
- planning for execution of the Additional Off-site Soil Vapor Investigation, and
- installation of one (1) intermediate bedrock well along Driving Park Avenue to the east of the Facility.

This report provides a summary of the RI activities performed and the activities planned for the current quarter from April through June 2007.

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NYSDEC  
10 April 2007  
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If you have any questions regarding this report, do not hesitate to contact us.

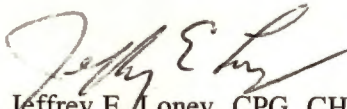
Sincerely yours,  
HALEY & ALDRICH OF NEW YORK



Thomas D. Wells  
Senior Environmental Geologist



Denis M. Conley  
Senior Scientist



Jeffrey E. Loney, CPG, CHMM  
Vice President

Enclosures

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## 1. INTRODUCTION

This Progress Report covers remedial investigation (RI) activities performed at the Delphi Corporation facility located at 1000 Lexington Avenue in the City of Rochester, Monroe County, New York from 1 January through 31 March 2007. The Delphi property is hereinafter referred to as the "site." The site location is shown on Figure 1.

This report has been prepared in accordance with the terms of an Order On Consent between the New York State Department of Environmental Conservation (NYSDEC) and Delphi for a remedial investigation and feasibility study of the Delphi site ("RI/FS Order," Index # B8-0531-98-06). The Delphi site is listed as Site # 8-28-064 on the New York State Registry of Inactive Hazardous Waste Disposal Sites, and it is identified under state and federal programs regulating management of hazardous waste by its U.S. Environmental Protection Agency (EPA) identification number NYD002215234.

Activities performed during the reporting period included the following:

- As requested in the Department's letter dated 27 November 2006, Delphi prepared a written response to the Department's comments on the DRAFT Remedial Investigation and Human Health Risk Assessment (Haley & Aldrich, 2005).
- Concurrent with the response submittal, Delphi prepared Amendment No. 5 to the RI/FS Work Plan which prescribes the scope of work for the Additional Off-site Investigation to be conducted to the east of the Delphi Facility.
- An intermediate bedrock well, R-403, was installed east of the site along the north side Driving Park Road and directly across from the American Packaging Corporation facility.
- Final laboratory reports for the soil samples collected during the completion of the Stoddard Tank Farm Interim Remedial Measure were validated.

The remainder of this report presents the results of the RI activities performed during this reporting period and describes the activities scheduled to be undertaken during the next reporting period.

## **2. REMEDIAL INVESTIGATION ACTIVITIES**

### **Additional Off-Site Investigation Activities**

In accordance with Amendment No. 5 to the RI/FS Work Plan, one (1) intermediate bedrock well was installed east of the facility equidistant between R-305 and R-401. The well, designated R-403, was installed to a depth of 32 feet below ground surface (BGS) and constructed with a 10 foot open rock interval from 22 to 32 feet BGS. The Test Boring and Monitoring Well Completion Reports for R-403 are presented in Appendix A..

Nothnagle Drilling of Scottsville, New York installed the well in accordance with the RI/FS Work Plan. Monitoring of VOCs in ambient air was performed by Haley & Aldrich during the installation using a handheld photo-ionization (PID). No VOCs were detected during the installation.

### **Stoddard Tank Farm Soil Sampling Results**

In accordance with the IRM Work Plan for Soil Removal, dated 19 September 2006, post-excavation soil samples were collected from the bottom and sidewalls of the western end of the Stoddard Tank Farm after soil removal was completed. Samples were collected by Haley & Aldrich from the surface using disposable hand tools and placed directly into pre-cleaned sample containers. The samples were submitted under chain of custody to Paradigm Environmental for the analysis of VOC by EPA Method 8260B and PAHs by EPA Method 8270C.

Laboratory analytical reports for the samples submitted were validated during this reporting period. Haley & Aldrich validated the data presented in the analytical reports in accordance with the U.S. Environmental Protection Agency, National Functional Guidelines for Organic Data Review (EPA 540/R-99/008), and method protocol criteria as prescribed by "Test Methods For Evaluating Solid Waste, SW-846, Update III, 1996". The validated analytical results are summarized in Table 1. Copies of laboratory analysis reports are attached in Appendix B.

### **Plans for Evaluation of Soil Vapor Intrusion**

Delphi and Haley & Aldrich met with representatives from NYSDEC and the Monroe County Health Department at the Delphi facility to discuss the evaluation of soil vapor at the adjacent American Packaging Corporation Facility. The general scope and methods for an evaluation were agreed upon at the meeting, and Delphi submitted a proposed work plan for the off-site evaluation (Amendment No. 5 to the RI Work Plan) in a letter to NYSDEC dated 22 February 2007. Delphi is awaiting agency concurrence for the off-site soil vapor investigation activities.

### 3. **UPCOMING RI/FS ACTIVITIES**

The following RI/FS activities are planned for the upcoming reporting period of April through June 2007.

#### **Indoor Air Quality/Soil Vapor Intrusion Assessment**

In accordance with Amendment No. 5 to the RI/FS Work Plan, a soil vapor intrusion sampling and groundwater monitoring event will be performed at the adjacent American Packaging Corporation facility. The scope of the investigation will include the sampling and analysis of soil vapor collected along the western and north western sides of the APC facility and the collection and analysis of groundwater from the existing monitoring wells on the APC property.

Amendment No. 5 was submitted to the Department in a letter dated 22 February 2007. Delphi will conduct these activities in the upcoming quarter upon written approval of the Amendment by the Department and receipt of an executed access agreement with APC. Delphi is currently in negotiations with APC for access to the existing monitoring wells and authorization to install soil vapor probes on their property. Delphi has tentatively scheduled the indoor-air and soil-vapor sampling for the end of May pending execution of the access agreement.

#### **Stoddard Tank Farm**

Completion of the IRM for the Stoddard Tank Farm (including final paving) is planned for the next quarter. Planned activities include the removal of the remaining tanks and the installation of one (1) soil boring to assess subsurface conditions. The soil sampling will be performed in accordance with the procedures in the RI/FS Work Plan. A final engineering report for the IRM will be submitted after completion of these activities.

#### **Bedrock Groundwater Sampling**

Groundwater and LNAPL (if present) will be sampled from R-403 during the next quarter. Samples will be collected in accordance with the RI/FS Work Plan and analyzed for the parameters prescribed in Amendment No. 5 to the RI/FS Work Plan.

### 4. **CITIZEN PARTICIPATION ACTIVITIES**

No citizen participation activities were performed during this reporting period. No citizen participation activities are planned for the next reporting period.

## REFERENCES

RI/FS Work Plan, Delphi Automotive Systems Facility, 1000 Lexington Avenue, Rochester, Monroe County, New York, Registry Site No. 8-28-064, Volume V. Haley & Aldrich of New York, October 2001.

Amendment No. 5 to the RI/FS Work Plan, Delphi Automotive Systems Facility, 1000 Lexington Avenue, Rochester, Monroe County, New York, Registry Site No. 8-28-064, Volume V. Haley & Aldrich of New York, 22 February 2007.

Quarterly Progress Report No. 1 - 17, Remedial Investigation, Delphi Facility, 1000 Lexington Avenue, Rochester, New York, Site No. 8-28-064, EPA ID No. NYD002215234, Haley & Aldrich of New York.

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TABLE 1

Delphi Corporation - Lexington Avenue Facility Stoddard Tank Farm Excavation - Soil Sample Results									Soil Quality Comparison Criteria <sup>1</sup>
Sample ID	STF-SW-B3-E	STF-SW-B4-W	STF-SW-B1-E	STF-SW-N-02	STF-SW-SE-02	STF-SW-B2-W	STF-SE-SW-02	STF-SW-W-02	
Sample Date	11/7/2006	11/7/2006	10/31/2006	10/31/2006	10/31/2006	11/2/2006	11/2/2006	11/2/2006	
<b>Halocarbons (µg/Kg)</b>									(µg/Kg)
Chloroform	ND < 9.75	ND < 166	ND < 9.48	16.6	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	700,000
<b>Aromatics (µg/Kg)</b>									(µg/Kg)
Ethylbenzene	ND < 9.75	885	ND < 9.48	ND < 7.66	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	780,000
m,p-Xylene	ND < 9.75	1730	ND < 9.48	ND < 7.66	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	1,000,000
o-Xylene	ND < 9.75	475	ND < 9.48	ND < 7.66	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	1,000,000
Toluene	ND < 9.75	ND < 166	ND < 9.48	8.38	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	1,000,000
Styrene	ND < 9.75	ND < 166	30.4	17.5	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	NS
<b>Ketones (µg/Kg)</b>									(µg/Kg)
Acetone	293	ND < 828	584	252	96.4	ND < 528	201	243	1,000,000
<b>Aromatics (µg/Kg)</b>									(µg/Kg)
n-Butylbenzene	ND < 9.75	ND < 166	250	ND < 7.66	ND < 11.1	ND < 106	ND < 8.05	ND < 10.1	1,000,000
sec-Butylbenzene	14	11,400	256	ND < 7.66	ND < 11.1	256	ND < 8.05	28.9	1,000,000
Isopropylbenzene	17	12,800	46.2	ND < 7.66	ND < 11.1	605	ND < 8.05	ND < 10.1	NS
Naphthalene	ND < 24.4	2,490.00	74.1	ND < 19.2	ND < 27.8	339	ND < 20.1	ND < 25.2	1,000,000
1,2,4-Trimethylbenzene	729	E 81,300	E 2,500	ND < 7.66	ND < 11.1	13,100	ND < 8.05	73.2	380,000
1,3,5-Trimethylbenzene	207	E 45,100	586	ND < 7.66	ND < 11.1	2,270	ND < 8.05	13.8	380,000
<b>Base / Neutrals (µg/Kg)</b>									(µg/Kg)
Acenaphthene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,000,000
Acenaphthylene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,000,000
Anthracene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,000,000
Benzo (a) anthracene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	354	11,000
Benzo (a) pyrene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	340	1,100
Benzo (b) fluoranthene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	11,000
Benzo (g,h,i) perylene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,000,000
Benzo (k) fluoranthene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	110,000
Chrysene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	414	110,000
Dibenz (a,h) anthracene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,100
Fluoranthene	ND < 334	ND < 336	ND < 324	ND < 321	338	ND < 331	ND < 312	1,150	1,000,000
Fluorene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	1,000,000
Indeno (1,2,3-cd) pyrene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	ND < 327	11,000
Naphthalene	ND < 334	935	ND < 324	ND < 321	ND < 332	392	ND < 312	ND < 327	1,000,000
Phenanthrene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	875	1,000,000
Pyrene	ND < 334	ND < 336	ND < 324	ND < 321	ND < 332	ND < 331	ND < 312	852	1,000,000

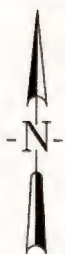
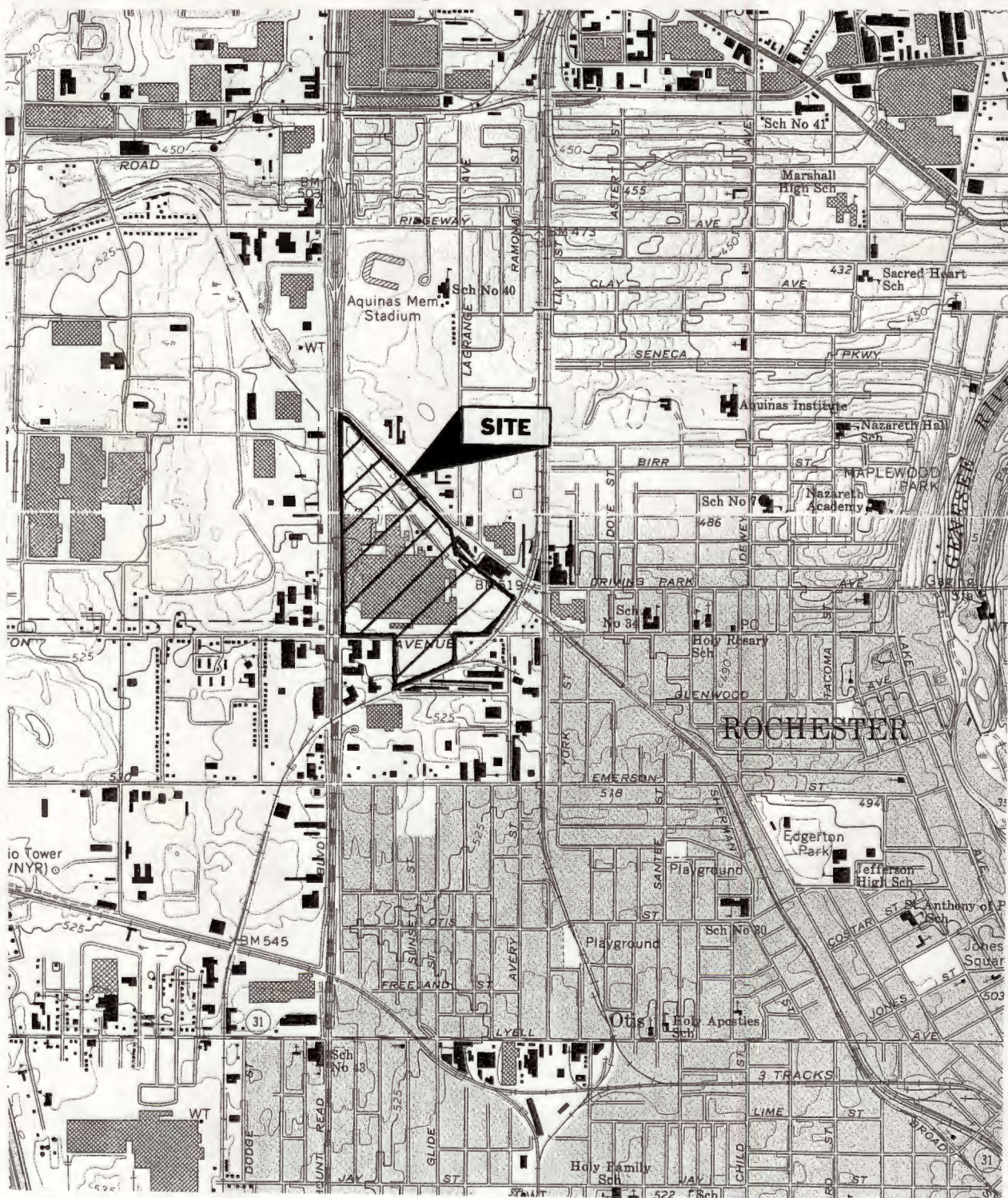
NS - No Standard Available

NA - Not Analyzed for this Parameter

ND - Not Detected Above Reporting Limit

1) Soil Quality Comparison Criteria obtained from NYS DEC Environmental Remediation Programs  
Soil Cleanup Objectives (6 NYCRR Subpart 375-6) (December, 2006)

70014-054



QUADRANGLE LOCATION: ROCHESTER WEST, N.Y.



HALEY & ALDRICH

UNDERGROUND  
ENGINEERING &  
ENVIRONMENTAL  
SOLUTIONS

DELPHI CORPORATION  
LEXINGTON AVENUE FACILITY RI/FS  
ROCHESTER, NEW YORK

## PROJECT LOCUS

SCALE: 1" = 2000'

MAY 2002

FIGURE 1

**APPENDIX A**

**Test Boring and Monitoring Well Completion Reports**

## CORE BORING REPORT

Boring No. R-403

File No. 70014-065

Sheet No. 1 of 2

Depth (ft)	Drilling Rate Min./ft	Run No.	Depth (ft)	Recovery/RQD		Weath- ering	Elev./ Depth (ft)	Visual Description and Remarks
				in.	%			
0								SEE TEST BORING REPORT FOR OVERBURDEN DETAILS
								Advanced augers to 9.3 ft. without sampling. Observed auger refusal on bedrock at 9.3 ft.
5								
10		RI	9.3 19.3	120 67	100 56			9.3 Began Coring at 9.3 ft. Moderately hard, slightly weathered, light gray aphanitic, very thin bedded DOLOMITIC MUDSTONE with moderately close, moderately to highly weathered layers and occasional pits. Some secondary mineralization.
	2							<del>ROCHESTER SHALE</del>
	3							
	2							
	2							
15	2							
	2							
	2							
	2							
20		R3	19.3 22.0	32 20	100 63			19.3 Similar as above.
		R3	22.0 32.0	120 86	100 72			Similar as above, except with infrequent limestone, interbedded with moderately close, moderately weathered layers.
25								

## CORE BORING REPORT

Boring No. R-403  
File No. 70014-065  
Sheet No. 2 of 2

Depth (ft)	Drilling Rate Min./ft	Run No.	Depth (ft)	Recovery/RQD		Weath- ering	Elev./ Depth (ft)	Visual Description and Remarks
				in.	%			
25								<b>-ROCHESTER SHALE-</b>
30								
							32.0	<b>Bottom of Boring at 32.0 ft.</b>  Note: 1. Installed 8.0 in casing to 9.3 ft. Reamed HQ corehole from 9.3 ft. to 22.0 ft. Monitoring interval installed from 22.0 to 32.0 ft.

# BEDROCK OBSERVATION WELL INSTALLATION REPORT

Well No.

R-403

Boring No.

R-403

PROJECT LEXINGTON AVENUE FACILITY RI/FS

H&amp;A FILE NO. 70014-054

LOCATION ROCHESTER, NEW YORK

PROJECT MGR. D. CONLEY

CLIENT DELPHI CORPORATION

FIELD REP. D. NOSTRANT

CONTRACTOR NOTHANGLE DRILLING

DATE INSTALLED 3/27/2007

DRILLER N. SHORT

WATER LEVEL

Ground El. \_\_\_\_\_ ft

Location \_\_\_\_\_

El. Datum NGVD

☐ Guard Pipe☒ Roadway Box

SOIL/ROCK CONDITIONS	BOREHOLE BACKFILL	Type of protective cover/lock		Bolted Steel Cover														
OVERBURDEN SOILS	CEMENT 1.0 FT.		Depth of top of guard pipe/roadway box below ground surface	Flush	ft													
	Not determined		Depth of top of riser casing below ground surface	0.2	ft													
			Type of protective casing:	Roadway Box														
WEATHERED BEDROCK 9.3 FT.	CEMENT-BENTONITE GROUT	Length	1.0	ft														
ROCHESTER SHALE		Inside Diameter	8.0	in														
		Depth of bottom of roadway box	1.0	ft														
		<table border="1"> <thead> <tr> <th>Type of Seals</th> <th>Top of Seal (ft)</th> <th>Thickness (ft)</th> </tr> </thead> <tbody> <tr> <td>Concrete</td> <td>0.0</td> <td>1.0</td> </tr> <tr> <td>Cement Grout</td> <td>1.0</td> <td>22.0</td> </tr> <tr> <td>Bentonite</td> <td>--</td> <td>--</td> </tr> <tr> <td>Silica Quartz Sand</td> <td>--</td> <td>--</td> </tr> </tbody> </table>		Type of Seals	Top of Seal (ft)	Thickness (ft)	Concrete	0.0	1.0	Cement Grout	1.0	22.0	Bentonite	--	--	Silica Quartz Sand	--	--
		Type of Seals	Top of Seal (ft)	Thickness (ft)														
Concrete	0.0	1.0																
Cement Grout	1.0	22.0																
Bentonite	--	--																
Silica Quartz Sand	--	--																
Depth to the top of bedrock	9.3	ft																
Type of riser casing:	Steel																	
Inside diameter of riser casing	4.0	in																
Type of backfill around riser	Cement Grout																	
	22.0 FT.	Diameter of borehole	8.0	in														
		Depth to top of open core interval/bottom of riser casing	22.0	ft														
		Type of open core interval	NX Core															
		Diameter of open core interval	3	in														
	OPEN ROCK INTERVAL	L2	Depth of bottom of open core interval	32.0	ft													
			Depth of bottom of test borehole	32.0	ft													
32.0	32.0	(Bottom of Exploration) (Numbers refer to depth from ground surface in feet)																
(Not to Scale)																		

$$\begin{array}{rcl}
 22 & \text{ft} & + \\
 \text{Casing Length (L1)} & & \\
 10 & \text{ft} & \\
 \text{Screened Interval (L2)} & & \\
 \hline
 & = & 32 \text{ ft} \\
 & & \text{Pay length}
 \end{array}$$

COMMENTS:

**APPENDIX B**

**Soil Sampling Results – Stoddard Tank Farm**

### Volatile Analysis Report for Soils/Solids/Sludges

 Client: Delphi

Client Job Site: Metzger Tank Farm  
 Excavation  
 Client Job Number: 70014-063  
 Field Location: STF-SW-B2-W  
 Field ID Number: N/A  
 Sample Type: Soil

Lab Project Number: 06-3345  
 Lab Sample Number: 11191  
 Date Sampled: 11/02/2006  
 Date Received: 11/02/2006  
 Date Analyzed: 11/07/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 106
Bromomethane	ND< 106
Bromoform	ND< 106
Carbon Tetrachloride	ND< 106
Chloroethane	ND< 106
Chloromethane	ND< 106
2-Chloroethyl vinyl Ether	ND< 106
Chloroform	ND< 106
Dibromochloromethane	ND< 106
1,1-Dichloroethane	ND< 106
1,2-Dichloroethane	ND< 106
1,1-Dichloroethene	ND< 106
cis-1,2-Dichloroethene	ND< 106
trans-1,2-Dichloroethene	ND< 106
1,2-Dichloropropane	ND< 106
cis-1,3-Dichloropropene	ND< 106
trans-1,3-Dichloropropene	ND< 106
Methylene chloride	ND< 264
1,1,2,2-Tetrachloroethane	ND< 106
Tetrachloroethene	ND< 106
1,1,1-Trichloroethane	ND< 106
1,1,2-Trichloroethane	ND< 106
Trichloroethene	ND< 106
Trichlorofluoromethane	ND< 106
Vinyl chloride	ND< 106

Aromatics	Results in ug / Kg
Benzene	ND< 106
Chlorobenzene	ND< 106
Ethylbenzene	ND< 106
Toluene	ND< 106
m,p-Xylene	ND< 106
o-Xylene	ND< 106
Styrene	ND< 106
1,2-Dichlorobenzene	ND< 106
1,3-Dichlorobenzene	ND< 106
1,4-Dichlorobenzene	ND< 106

Ketones	Results in ug / Kg
Acetone	ND< 528
2-Butanone	ND< 264
2-Hexanone	ND< 264
4-Methyl-2-pentanone	ND< 264

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 264
Vinyl acetate	ND< 264


ELAP Number 10958

Method: EPA 8260B

Data File: V40624.D

Comments: ND denotes Non Detect  
 ug / Kg = microgram per Kilogram  
 Surrogate outliers indicate probable matrix interference

Signature:

  
 Bruce Hoogesteger: Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation

Client Job Number: 70014-063  
Field Location: STF-SW-B2-W  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345

Lab Sample Number: 11191

Date Sampled: 11/02/2006

Date Received: 11/02/2006

Date Analyzed: 11/07/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 106	1,2,4-Trimethylbenzene	13,100
sec-Butylbenzene	256	1,3,5-Trimethylbenzene	2,270
tert-Butylbenzene	ND< 106		
Isopropylbenzene	605		
Naphthalene	339		

ELAP Number 10958

Method: EPA 8260B

Data File: V40624.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
Surrogate outliers indicate probable matrix interference

Signature: 

Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges**

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-SW-02  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345  
Lab Sample Number: 11192  
Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/07/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 8.05
Bromomethane	ND< 8.05
Bromoform	ND< 8.05
Carbon Tetrachloride	ND< 8.05
Chloroethane	ND< 8.05
Chloromethane	ND< 8.05
2-Chloroethyl vinyl Ether	ND< 8.05
Chloroform	ND< 8.05
Dibromochloromethane	ND< 8.05
1,1-Dichloroethane	ND< 8.05
1,2-Dichloroethane	ND< 8.05
1,1-Dichloroethene	ND< 8.05
cis-1,2-Dichloroethene	ND< 8.05
trans-1,2-Dichloroethene	ND< 8.05
1,2-Dichloropropane	ND< 8.05
cis-1,3-Dichloropropene	ND< 8.05
trans-1,3-Dichloropropene	ND< 8.05
Methylene chloride	ND< 20.1
1,1,2,2-Tetrachloroethane	ND< 8.05
Tetrachloroethene	ND< 8.05
1,1,1-Trichloroethane	ND< 8.05
1,1,2-Trichloroethane	ND< 8.05
Trichloroethene	ND< 8.05
Trichlorofluoromethane	ND< 8.05
Vinyl chloride	ND< 8.05

Aromatics	Results in ug / Kg
Benzene	ND< 8.05
Chlorobenzene	ND< 8.05
Ethylbenzene	ND< 8.05
Toluene	ND< 8.05
m,p-Xylene	ND< 8.05
o-Xylene	ND< 8.05
Styrene	ND< 8.05
1,2-Dichlorobenzene	ND< 8.05
1,3-Dichlorobenzene	ND< 8.05
1,4-Dichlorobenzene	ND< 8.05

Ketones	Results in ug / Kg
Acetone	201
2-Butanone	ND< 20.1
2-Hexanone	ND< 20.1
4-Methyl-2-pentanone	ND< 20.1

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 20.1
Vinyl acetate	ND< 20.1

ELAP Number 10958

Method: EPA 8260B

Data File: V40625.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
Surrogate outliers indicate probable matrix interference

Signature:

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**Client: DelphiClient Job Site: Metzger Tank Farm  
ExcavationClient Job Number: 70014-063  
Field Location: STF-SW-SW-02  
Field ID Number: N/A  
Sample Type: SoilLab Project Number: 06-3345  
Lab Sample Number: 11192Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/07/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 8.05	1,2,4-Trimethylbenzene	ND< 8.05
sec-Butylbenzene	ND< 8.05	1,3,5-Trimethylbenzene	ND< 8.05
tert-Butylbenzene	ND< 8.05		
Isopropylbenzene	ND< 8.05		
Naphthalene	ND< 20.1		

ELAP Number 10958

Method: EPA 8260B

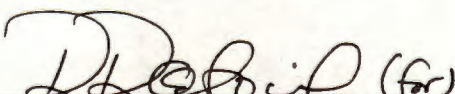
Data File: V40625.D

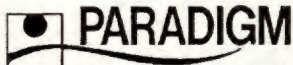
Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

  
Bruce Hoogesteger: Technical Director



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-W-02  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345  
Lab Sample Number: 11193  
Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/07/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 10.1
Bromomethane	ND< 10.1
Bromoform	ND< 10.1
Carbon Tetrachloride	ND< 10.1
Chloroethane	ND< 10.1
Chloromethane	ND< 10.1
2-Chloroethyl vinyl Ether	ND< 10.1
Chloroform	ND< 10.1
Dibromochloromethane	ND< 10.1
1,1-Dichloroethane	ND< 10.1
1,2-Dichloroethane	ND< 10.1
1,1-Dichloroethene	ND< 10.1
cis-1,2-Dichloroethene	ND< 10.1
trans-1,2-Dichloroethene	ND< 10.1
1,2-Dichloropropane	ND< 10.1
cis-1,3-Dichloropropene	ND< 10.1
trans-1,3-Dichloropropene	ND< 10.1
Methylene chloride	ND< 25.2
1,1,2,2-Tetrachloroethane	ND< 10.1
Tetrachloroethene	ND< 10.1
1,1,1-Trichloroethane	ND< 10.1
1,1,2-Trichloroethane	ND< 10.1
Trichloroethene	ND< 10.1
Trichlorofluoromethane	ND< 10.1
Vinyl chloride	ND< 10.1

ELAP Number 10958

Method: EPA 8260B

Aromatics	Results in ug / Kg
Benzene	ND< 10.1
Chlorobenzene	ND< 10.1
Ethylbenzene	ND< 10.1
Toluene	ND< 10.1
m,p-Xylene	ND< 10.1
o-Xylene	ND< 10.1
Styrene	ND< 10.1
1,2-Dichlorobenzene	ND< 10.1
1,3-Dichlorobenzene	ND< 10.1
1,4-Dichlorobenzene	ND< 10.1

Ketones	Results in ug / Kg
Acetone	243
2-Butanone	ND< 25.2
2-Hexanone	ND< 25.2
4-Methyl-2-pentanone	ND< 25.2

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 25.2
Vinyl acetate	ND< 25.2

Data File: V40626.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
Surrogate outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogestegen, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-W-02  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345  
Lab Sample Number: 11193  
Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/07/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 10.1	1,2,4-Trimethylbenzene	73.2
sec-Butylbenzene	28.9	1,3,5-Trimethylbenzene	13.8
tert-Butylbenzene	ND< 10.1		
Isopropylbenzene	ND< 10.1		
Naphthalene	ND< 25.2		

ELAP Number 10958

Method: EPA 8260B

Data File: V40626.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
Surrogate outliers indicate probable matrix interference

Signature: 

Bruce Hoogesteger, Technical Director

# Volatile Analysis Report

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-w-02  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345

Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/07/2006

Lab Sample Number: 11193 MS

## Laboratory Spike Recovery Table

Spiked Compound	Spike Conc	% Recovery	QC Limits
Chloromethane	198 ug / Kg	98.4	52% - 138%
Vinyl chloride	198 ug / Kg	106	60% - 138%
Bromomethane	198 ug / Kg	97.4	56% - 160%
Chloroethane	198 ug / Kg	111	68% - 130%
Trichlorofluoromethane	198 ug / Kg	107	78% - 130%
1,1-Dichloroethene	198 ug / Kg	96.3	72% - 132%
Methylene chloride	198 ug / Kg	102	74% - 138%
trans-1,2-dichloroethene	198 ug / Kg	95.6	68% - 136%
1,1-Dichloroethane	198 ug / Kg	94.7	60% - 150%
Bromoform	198 ug / Kg	79.6	62% - 134%
Chloroform	198 ug / Kg	105	70% - 142%
1,1,1-Trichloroethane	198 ug / Kg	96.5	52% - 160%
Carbon tetrachloride	198 ug / Kg	103	64% - 144%
Benzene	198 ug / Kg	105	64% - 148%
1,2-Dichloroethane	198 ug / Kg	112	64% - 138%
Trichloroethene	198 ug / Kg	97.6	64% - 150%
1,2-Dichloropropane	198 ug / Kg	112	62% - 152%
Bromodichloromethane	198 ug / Kg	105	64% - 146%
cis-1,3-Dichloropropene	198 ug / Kg	99.4	62% - 132%
Toluene	198 ug / Kg	98.5	80% - 130%
trans-1,3-Dichloropropene	198 ug / Kg	94.7	60% - 138%
1,1,2-Trichloroethane	198 ug / Kg	104	76% - 144%
Tetrachloroethene	198 ug / Kg	94.4	64% - 158%
Dibromochloromethane	198 ug / Kg	99.1	80% - 132%
Chlorobenzene	198 ug / Kg	85.1	80% - 122%
Ethylbenzene	198 ug / Kg	90.6	74% - 150%
1,1,2,2,-Tetrachloroethane	198 ug / Kg	89.8	52% - 152%
1,3-Dichlorobenzene	198 ug / Kg	58.2	76% - 120%
1,4-Dichlorobenzene	198 ug / Kg	60.3	70% - 126%
1,2-Dichlorobenzene	198 ug / Kg	65.1	66% - 128%

ELAP Number 10958

Method: EPA 8260B

Comments:

Signature:

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report**

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation

Lab Project Number: 06-3345

Client Job Number: 70014-063

Field Location: STF-SW-w-02

Date Sampled: 11/02/2006

Field ID Number: N/A

Date Received: 11/02/2006

Sample Type: Soil

Date Analyzed: 11/07/2006

Lab Sample Number: 11193 MSD

**Laboratory Spike Recovery Table**

Spiked Compound	Spike Conc	% Recovery	QC Limits
Chloromethane	213 ug / Kg	122	52% - 138%
Vinyl chloride	213 ug / Kg	125	60% - 138%
Bromomethane	213 ug / Kg	127	56% - 160%
Chloroethane	213 ug / Kg	132	68% - 130%
Trichlorofluoromethane	213 ug / Kg	125	78% - 130%
1,1-Dichloroethene	213 ug / Kg	118	72% - 132%
Methylene chloride	213 ug / Kg	122	74% - 138%
trans-1,2-dichloroethene	213 ug / Kg	118	68% - 136%
1,1-Dichloroethane	213 ug / Kg	134	60% - 150%
Bromoform	213 ug / Kg	104	62% - 134%
Chloroform	213 ug / Kg	137	70% - 142%
1,1,1-Trichloroethane	213 ug / Kg	124	52% - 160%
Carbon tetrachloride	213 ug / Kg	125	64% - 144%
Benzene	213 ug / Kg	127	64% - 148%
1,2-Dichloroethane	213 ug / Kg	136	64% - 138%
Trichloroethene	213 ug / Kg	122	64% - 150%
1,2-Dichloropropane	213 ug / Kg	136	62% - 152%
Bromodichloromethane	213 ug / Kg	135	64% - 146%
cis-1,3-Dichloropropene	213 ug / Kg	125	62% - 132%
Toluene	213 ug / Kg	119	80% - 130%
trans-1,3-Dichloropropene	213 ug / Kg	118	60% - 138%
1,1,2-Trichloroethane	213 ug / Kg	132	76% - 144%
Tetrachloroethene	213 ug / Kg	115	64% - 158%
Dibromochloromethane	213 ug / Kg	124	80% - 132%
Chlorobenzene	213 ug / Kg	109	80% - 122%
Ethylbenzene	213 ug / Kg	115	74% - 150%
1,1,2,2-Tetrachloroethane	213 ug / Kg	116	52% - 152%
1,3-Dichlorobenzene	213 ug / Kg	70.0	76% - 120%
1,4-Dichlorobenzene	213 ug / Kg	72.1	70% - 126%
1,2-Dichlorobenzene	213 ug / Kg	74.7	66% - 128%

ELAP Number 10958

Method: EPA 8260B

Comments:

Signature:

  
Bruce Hoogesteger, Technical Director



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Tank Farm Excavation

Lab Project Number: 06-3345

Lab Sample Number: 11191

Client Job Number: 70014-063

Field Location: STF-SW-BZ-W

Date Sampled: 11/02/2006

Field ID Number: N/A

Date Received: 11/02/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 331
Acenaphthylene	ND< 331
Anthracene	ND< 331
Benzo (a) anthracene	ND< 331
Benzo (a) pyrene	ND< 331
Benzo (b) fluoranthene	ND< 331
Benzo (g,h,i) perylene	ND< 331
Benzo (k) fluoranthene	ND< 331
Chrysene	ND< 331
Dibenz (a,h) anthracene	ND< 331
Fluoranthene	ND< 331
Fluorene	ND< 331
Indeno (1,2,3-cd) pyrene	ND< 331
Naphthalene	392
Phenanthrene	ND< 331
Pyrene	ND< 331

ELAP Number 10958

Method: EPA 8270C

Data File: S31999.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger: Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: Delphi

Client Job Site: Metzger Tank Farm Excavation

Lab Project Number: 06-3345

Lab Sample Number: 11192

Client Job Number: 70014-063

Field Location: STF-SW-SW-02

Date Sampled: 11/02/2006

Field ID Number: N/A

Date Received: 11/02/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 312
Acenaphthylene	ND< 312
Anthracene	ND< 312
Benzo (a) anthracene	ND< 312
Benzo (a) pyrene	ND< 312
Benzo (b) fluoranthene	ND< 312
Benzo (g,h,i) perylene	ND< 312
Benzo (k) fluoranthene	ND< 312
Chrysene	ND< 312
Dibenz (a,h) anthracene	ND< 312
Fluoranthene	ND< 312
Fluorene	ND< 312
Indeno (1,2,3-cd) pyrene	ND< 312
Naphthalene	ND< 312
Phenanthrene	ND< 312
Pyrene	ND< 312

ELAP Number 10958

Method: EPA 8270C

Data File: S32000.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: Delphi

Client Job Site: Metzger Tank Farm Excavation

Lab Project Number: 06-3345

Lab Sample Number: 11193

Client Job Number: 70014-063

Field Location: STF-SW-W-02

Date Sampled: 11/02/2006

Field ID Number: N/A

Date Received: 11/02/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 327
Acenaphthylene	ND< 327
Anthracene	ND< 327
Benzo (a) anthracene	354
Benzo (a) pyrene	340
Benzo (b) fluoranthene	ND< 327
Benzo (g,h,i) perylene	ND< 327
Benzo (k) fluoranthene	ND< 327
Chrysene	414
Dibenz (a,h) anthracene	ND< 327
Fluoranthene	1,150
Fluorene	ND< 327
Indeno (1,2,3-cd) pyrene	ND< 327
Naphthalene	ND< 327
Phenanthrene	875
Pyrene	852

ELAP Number 10958

Method: EPA 8270C

Data File: S32001.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature: 

Bruce Hoogeslager, Technical Director

**Semi-Volatile Analysis Report**

Client: **Delphi**

Client Job Site: Metzger Tank Farm  
Excavation

Lab Project Number: 06-3345

Client Job Number: 70014-063

Field Location: STF-SW-W-02

Date Sampled: 11/02/2006

Field ID Number: N/A

Date Received: 11/02/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Lab Sample Number: 11193 MS

**Laboratory Spike Recovery Table**

Spiked Compound	Spike Conc	% Recovery	Soil QC Limits	Water QC Limits
2-Chlorophenol	2,460 ug / Kg	76.0	60% - 97%	46% - 96%
1,4-Dichlorobenzene	1,640 ug / Kg	68.2	59% - 89%	23% - 70%
n-Nitroso-di-n-propylamine	1,640 ug / Kg	66.2	63% - 95%	52% - 94%
Phenol	2,460 ug / Kg	68.8	53% - 99%	10% - 95%
4-Chloro-3-methylphenol	2,460 ug / Kg	81.2	67% - 106%	53% - 107%
2,4-Dichlorophenol	2,460 ug / Kg	80.4	59% - 102%	48% - 104%
2,6-Dichlorophenol	2,460 ug / Kg	77.2	63% - 102%	50% - 104%
2,4-Dimethylphenol	2,460 ug / Kg	77.2	64% - 106%	52% - 103%
2-Nitrophenol	2,460 ug / Kg	71.5	60% - 102%	39% - 109%
1,2,4-Trichlorobenzene	1,640 ug / Kg	79.1	58% - 101%	30% - 78%
Acenaphthene	1,640 ug / Kg	78.4	67% - 98%	50% - 95%
2,4-Dinitrophenol	2,460 ug / Kg	17.9	10% - 124%	10% - 119%
2,4-Dinitrotoluene	1,640 ug / Kg	76.3	59% - 111%	31% - 121%
4-Nitrophenol	2,460 ug / Kg	71.3	42% - 123%	10% - 112%
2,4,6-Trichlorophenol	2,460 ug / Kg	89.4	65% - 106%	53% - 109%
4,6-Dinitro-2-methylphenol	2,460 ug / Kg	41.8	10% - 135%	10% - 120%
Pentachlorophenol	2,460 ug / Kg	92.2	21% - 134%	23% - 126%
Pyrene	1,640 ug / Kg	137	66% - 111%	59% - 109%

ELAP Number 10958

Method: EPA 8270C

Comments: ND denotes Not Spiked  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger, Technical Director

### Semi-Volatile Analysis Report

Client: Delphi

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-W-02  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3345

Date Sampled: 11/02/2006  
Date Received: 11/02/2006  
Date Analyzed: 11/06/2006

Lab Sample Number: 11193 MSD

Laboratory Spike Recovery Table

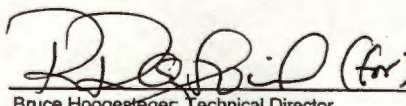
Spiked Compound	Spike Conc	% Recovery	Soil QC Limits	Water QC Limits
2-Chlorophenol	2,450 ug / Kg	68.7	60% - 97%	46% - 96%
1,4-Dichlorobenzene	1,640 ug / Kg	63.8	59% - 89%	23% - 70%
n-Nitroso-di-n-propylamine	1,640 ug / Kg	61.7	63% - 95%	52% - 94%
Phenol	2,450 ug / Kg	65.1	53% - 99%	10% - 95%
4-Chloro-3-methylphenol	2,450 ug / Kg	72.2	67% - 106%	53% - 107%
2,4-Dichlorophenol	2,450 ug / Kg	74.7	59% - 102%	48% - 104%
2,6-Dichlorophenol	2,450 ug / Kg	73.0	63% - 102%	50% - 104%
2,4-Dimethylphenol	2,450 ug / Kg	73.0	64% - 106%	52% - 103%
2-Nitrophenol	2,450 ug / Kg	64.9	60% - 102%	39% - 109%
1,2,4-Trichlorobenzene	1,640 ug / Kg	71.8	58% - 101%	30% - 78%
Acenaphthene	1,640 ug / Kg	77.7	67% - 98%	50% - 95%
2,4-Dinitrophenol	2,450 ug / Kg	12.8	10% - 124%	10% - 119%
2,4-Dinitrotoluene	1,640 ug / Kg	70.6	59% - 111%	31% - 121%
4-Nitrophenol	2,450 ug / Kg	65.3	42% - 123%	10% - 112%
2,4,6-Trichlorophenol	2,450 ug / Kg	84.1	65% - 106%	53% - 109%
4,6-Dinitro-2-methylphenol	2,450 ug / Kg	35.1	10% - 135%	10% - 120%
Pentachlorophenol	2,450 ug / Kg	86.6	21% - 134%	23% - 126%
Pyrene	1,640 ug / Kg	82.0	66% - 111%	59% - 109%

ELAP Number 10958

Method: EPA 8270C

Comments: ND denotes Not Spiked  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger, Technical Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

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

## CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

COMPANY: <u>Delphi</u>	COMPANY: <u>Delphi</u>	LAB PROJECT #: <u>06-3345</u>	CLIENT PROJECT #: <u>70014-063</u>
ADDRESS: <u>Lexington Ave</u>	ADDRESS: <u>Lexington Ave</u>	TURNAROUND TIME: (WORKING DAYS)	
CITY: <u>Rochester</u> STATE: <u>NY</u> ZIP: <u>14608</u>	CITY: <u>Rochester</u> STATE: <u>NY</u> ZIP: <u>14608</u>		
PHONE: <u>585-647-4766</u> FAX: <u>647-4878</u>	PHONE: <u>585-647-4766</u> FAX: <u>647-4878</u>		
ATTN: <u>Rick Eisenman</u>	ATTN: <u>Rick Eisenman</u>	QUOTE #:	
COMMENTS:		STD <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> OTHER	

PROJECT NAME/SITE NAME:

Metzger Tank Farm  
Excavation

## REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONCENTRATIONS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 11/2/06	13:25		X	STF-SW-BZ-W	S	2		11191
2 11/2/06	13:30		X	STF-SW-SW-02	S	1		11192
3 11/2/06	13:30		X	STF-SW-W-02	S	1		11193
4 11/2/06				STF-SW-W-02 Matrix Spike	S			111931
5				STF-SW-W-02 Matrix Spike Dup	S			111931
6								
7								
8								
9								
10								

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

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

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

At Lee 11/2/06 13:30  
 Sampled By Date/Time  
At Lee 11/2/06 1400  
 Relinquished By Date/Time  
Senzo 11/2/06 1400  
 Received By Date/Time  
Elizabeth A. Honch 11/2/06 1450  
 Received @ Lab By Date/Time

Total Cost:

P.I.F.

## Analytical Report Cover Page

For Lab Project # 06-3321

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil or solid samples have been reported on a dry weight basis, unless qualified "reported as received".

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The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

- "ND" = analyzed for but not detected.**
- "E" = Result has been estimated, calibration limit exceeded.**
- "D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.**
- "M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.**
- "B" = Method blank contained trace levels of analyte. Refer to included method blank report.**

This report contains a total of 8 pages.



ENVIRONMENTAL SERVICES, INC.

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### Volatile Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11123

Client Job Number: 70014-063

Field Location: STF-SW-B1-E

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 9.48
Bromomethane	ND< 9.48
Bromoform	ND< 9.48
Carbon Tetrachloride	ND< 9.48
Chloroethane	ND< 9.48
Chloromethane	ND< 9.48
2-Chloroethyl vinyl Ether	ND< 9.48
Chloroform	ND< 9.48
Dibromochloromethane	ND< 9.48
1,1-Dichloroethane	ND< 9.48
1,2-Dichloroethane	ND< 9.48
1,1-Dichloroethene	ND< 9.48
cis-1,2-Dichloroethene	ND< 9.48
trans-1,2-Dichloroethene	ND< 9.48
1,2-Dichloropropane	ND< 9.48
cis-1,3-Dichloropropene	ND< 9.48
trans-1,3-Dichloropropene	ND< 9.48
Methylene chloride	ND< 23.7
1,1,2,2-Tetrachloroethane	ND< 9.48
Tetrachloroethene	ND< 9.48
1,1,1-Trichloroethane	ND< 9.48
1,1,2-Trichloroethane	ND< 9.48
Trichloroethene	ND< 9.48
Trichlorofluoromethane	ND< 9.48
Vinyl chloride	ND< 9.48

Aromatics	Results in ug / Kg
Benzene	ND< 9.48
Chlorobenzene	ND< 9.48
Ethylbenzene	ND< 9.48
Toluene	ND< 9.48
m,p-Xylene	ND< 9.48
o-Xylene	ND< 9.48
Styrene	30.4
1,2-Dichlorobenzene	ND< 9.48
1,3-Dichlorobenzene	ND< 9.48
1,4-Dichlorobenzene	ND< 9.48

Ketones	Results in ug / Kg
Acetone	584
2-Butanone	ND< 23.7
2-Hexanone	ND< 23.7
4-Methyl-2-pentanone	ND< 23.7

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 23.7
Vinyl acetate	ND< 23.7

ELAP Number 10958

Method: EPA 8260B

Data File: V40582.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: 

Bruce Hoogesteger: Technical Director

### Volatile Analysis Report for Soils/Solids/Sludges

 Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11124

Client Job Number: 70014-063

Field Location: STF-SW-N-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 7.66
Bromomethane	ND< 7.66
Bromoform	ND< 7.66
Carbon Tetrachloride	ND< 7.66
Chloroethane	ND< 7.66
Chloromethane	ND< 7.66
2-Chloroethyl vinyl Ether	ND< 7.66
Chloroform	16.6
Dibromochloromethane	ND< 7.66
1,1-Dichloroethane	ND< 7.66
1,2-Dichloroethane	ND< 7.66
1,1-Dichloroethene	ND< 7.66
cis-1,2-Dichloroethene	ND< 7.66
trans-1,2-Dichloroethene	ND< 7.66
1,2-Dichloropropane	ND< 7.66
cis-1,3-Dichloropropene	ND< 7.66
trans-1,3-Dichloropropene	ND< 7.66
Methylene chloride	ND< 19.2
1,1,2,2-Tetrachloroethane	ND< 7.66
Tetrachloroethene	ND< 7.66
1,1,1-Trichloroethane	ND< 7.66
1,1,2-Trichloroethane	ND< 7.66
Trichloroethene	ND< 7.66
Trichlorofluoromethane	ND< 7.66
Vinyl chloride	ND< 7.66

Aromatics	Results in ug / Kg
Benzene	ND< 7.66
Chlorobenzene	ND< 7.66
Ethylbenzene	ND< 7.66
Toluene	8.38
m,p-Xylene	ND< 7.66
o-Xylene	ND< 7.66
Styrene	17.5
1,2-Dichlorobenzene	ND< 7.66
1,3-Dichlorobenzene	ND< 7.66
1,4-Dichlorobenzene	ND< 7.66

Ketones	Results in ug / Kg
Acetone	252
2-Butanone	ND< 19.2
2-Hexanone	ND< 19.2
4-Methyl-2-pentanone	ND< 19.2

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 19.2
Vinyl acetate	ND< 19.2

ELAP Number 10958

Method: EPA 8260B

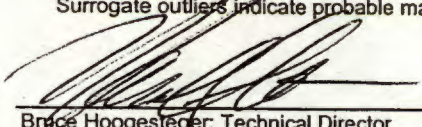
Data File: V40583.D

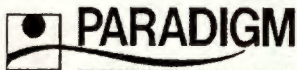
Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

  
 Bruce Hoogesteger: Technical Director



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11125

Client Job Number: 70014-063

Field Location: STF-SW-SE-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 11.1
Bromomethane	ND< 11.1
Bromoform	ND< 11.1
Carbon Tetrachloride	ND< 11.1
Chloroethane	ND< 11.1
Chloromethane	ND< 11.1
2-Chloroethyl vinyl Ether	ND< 11.1
Chloroform	ND< 11.1
Dibromochloromethane	ND< 11.1
1,1-Dichloroethane	ND< 11.1
1,2-Dichloroethane	ND< 11.1
1,1-Dichloroethene	ND< 11.1
cis-1,2-Dichloroethene	ND< 11.1
trans-1,2-Dichloroethene	ND< 11.1
1,2-Dichloropropane	ND< 11.1
cis-1,3-Dichloropropene	ND< 11.1
trans-1,3-Dichloropropene	ND< 11.1
Methylene chloride	ND< 27.8
1,1,2,2-Tetrachloroethane	ND< 11.1
Tetrachloroethene	ND< 11.1
1,1,1-Trichloroethane	ND< 11.1
1,1,2-Trichloroethane	ND< 11.1
Trichloroethene	ND< 11.1
Trichlorofluoromethane	ND< 11.1
Vinyl chloride	ND< 11.1

Aromatics	Results in ug / Kg
Benzene	ND< 11.1
Chlorobenzene	ND< 11.1
Ethylbenzene	ND< 11.1
Toluene	ND< 11.1
m,p-Xylene	ND< 11.1
o-Xylene	ND< 11.1
Styrene	ND< 11.1
1,2-Dichlorobenzene	ND< 11.1
1,3-Dichlorobenzene	ND< 11.1
1,4-Dichlorobenzene	ND< 11.1

Ketones	Results in ug / Kg
Acetone	96.4
2-Butanone	ND< 27.8
2-Hexanone	ND< 27.8
4-Methyl-2-pentanone	ND< 27.8

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 27.8
Vinyl acetate	ND< 27.8

ELAP Number 10958

Method: EPA 8260B

Data File: V40584.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:

Bruce Hoogesteger: Technical Director

# Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11123

Client Job Number: 70014-063

Field Location: STF-SW-B1-E

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/03/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 324
Acenaphthylene	ND< 324
Anthracene	ND< 324
Benzo (a) anthracene	ND< 324
Benzo (a) pyrene	ND< 324
Benzo (b) fluoranthene	ND< 324
Benzo (g,h,i) perylene	ND< 324
Benzo (k) fluoranthene	ND< 324
Chrysene	ND< 324
Dibenz (a,h) anthracene	ND< 324
Fluoranthene	ND< 324
Fluorene	ND< 324
Indeno (1,2,3-cd) pyrene	ND< 324
Naphthalene	ND< 324
Phenanthrene	ND< 324
Pyrene	ND< 324

ELAP Number 10958

Method: EPA 8270C

Data File: S31987.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

*File:*

Bruce Hoogesteger: Technical Director


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### Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

 Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11124

Client Job Number: 70014-063

Field Location: STF-SW-N-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/03/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 321
Acenaphthylene	ND< 321
Anthracene	ND< 321
Benzo (a) anthracene	ND< 321
Benzo (a) pyrene	ND< 321
Benzo (b) fluoranthene	ND< 321
Benzo (g,h,i) perylene	ND< 321
Benzo (k) fluoranthene	ND< 321
Chrysene	ND< 321
Dibenz (a,h) anthracene	ND< 321
Fluoranthene	ND< 321
Fluorene	ND< 321
Indeno (1,2,3-cd) pyrene	ND< 321
Naphthalene	ND< 321
Phenanthrene	ND< 321
Pyrene	ND< 321

ELAP Number 10958

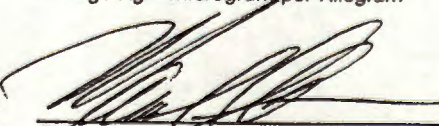
Method: EPA 8270C

Data File: S31988.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

  
 Bruce Hoogesteger: Technical Director

# Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11125

Client Job Number: 70014-063

Field Location: STF-SW-SE-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/03/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 332
Acenaphthylene	ND< 332
Anthracene	ND< 332
Benzo (a) anthracene	ND< 332
Benzo (a) pyrene	ND< 332
Benzo (b) fluoranthene	ND< 332
Benzo (g,h,i) perylene	ND< 332
Benzo (k) fluoranthene	ND< 332
Chrysene	ND< 332
Dibenz (a,h) anthracene	ND< 332
Fluoranthene	338
Fluorene	ND< 332
Indeno (1,2,3-cd) pyrene	ND< 332
Naphthalene	ND< 332
Phenanthrene	ND< 332
Pyrene	ND< 332

ELAP Number 10958

Method: EPA 8270C

Data File: S31989.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature:

*Signature*

Bruce Hoogesteger: Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11123

Client Job Number: 70014-063

Field Location: STF-SW-B1-E

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	250	1,2,4-Trimethylbenzene	E 2,500
sec-Butylbenzene	256	1,3,5-Trimethylbenzene	586
tert-Butylbenzene	ND< 9.48		
Isopropylbenzene	46.2		
Naphthalene	74.1		

ELAP Number 10958

Method: EPA 8260B


Data File: V40582.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: 

 Bryce Hoogesteger: Technical Director



ENVIRONMENTAL SERVICES, INC.

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**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11124

Client Job Number: 70014-063

Field Location: STF-SW-N-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 7.66	1,2,4-Trimethylbenzene	ND< 7.66
sec-Butylbenzene	ND< 7.66	1,3,5-Trimethylbenzene	ND< 7.66
tert-Butylbenzene	ND< 7.66		
Isopropylbenzene	ND< 7.66		
Naphthalene	ND< 19.2		

ELAP Number 10958

Method: EPA 8260B

Data File: V40583.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: 

Bruce Hoogesteger: Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: Delphi

Client Job Site: Metzger Excavation

Lab Project Number: 06-3321

Lab Sample Number: 11125

Client Job Number: 70014-063

Field Location: STF-SW-SE-02

Date Sampled: 10/31/2006

Field ID Number: N/A

Date Received: 10/31/2006

Sample Type: Soil

Date Analyzed: 11/06/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 11.1	1,2,4-Trimethylbenzene	ND< 11.1
sec-Butylbenzene	ND< 11.1	1,3,5-Trimethylbenzene	ND< 11.1
tert-Butylbenzene	ND< 11.1		
Isopropylbenzene	ND< 11.1		
Naphthalene	ND< 27.8		

ELAP Number 10958

Method: EPA 8260B

Data File: V40584.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: 

Bruce Hoogesteger: Technical Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

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

## CHAIN OF CUSTODY

06-3321

REPORT TO:		INVOICE TO:		LAB PROJECT #:	CLIENT PROJECT #:
COMPANY: Delphi	COMPANY: Delphi	LAB PROJECT #:	CLIENT PROJECT #:		
ADDRESS: Lexington Ave.	ADDRESS: Lexington Ave.				
CITY: Rochester STATE: NY ZIP:	CITY: Rochester STATE: NY ZIP:	70014-063			
PHONE: FAX: 647-4878	PHONE: FAX:	TURNAROUND TIME: (WORKING DAYS)			
ATTN: Rick Eisenman	ATTN: Rick Eisenman	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> OTHER			
PROJECT NAME/SITE NAME: Metzger Excavation		COMMENTS:		QUOTE #:	

REQUESTED ANALYSIS																								
DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAMINERS	TCL VOC-8260	PAH-8270C											REMARKS	PARADIGM LAB SAMPLE NUMBER				
1 10/31/06	13:25		X	STF-SW-B1-E	S	2	1	1												1	1	1	2	3
2 10/31/06	13:30		X	STF-SW-N-02	S	1	1	1												1	1	1	2	4
3 10/31/06	13:35		X	STF-SW-SE-02	S	↓	1	1												1	1	1	2	5
4																								
5																								
6																								
7																								
8																								
9																								
10																								

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

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Preservation:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Holding Time:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Temperature: 18°C	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Comments:	

Ethan Lee 10/31/06 - 13:30  
 Sampled By Date/Time  
 [Signature] 10/31/06 - 14:10  
 Relinquished By Date/Time  
 [Signature] 10/31/06 14:10  
 Received By Date/Time  
 Elizabeth A. Honch 10/31/06 1440  
 Received @ Lab By Date/Time

Total Cost:

P.I.F.

**Volatile Analysis Report for Soils/Solids/Sludges**

Client: **Delphi**

Client Job Site: Metzger Tank Farm  
Excavation  
Client Job Number: 70014-063  
Field Location: STF-SW-B3-E  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3399  
Lab Sample Number: 11390  
Date Sampled: 11/07/2006  
Date Received: 11/07/2006  
Date Analyzed: 11/10/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 9.75
Bromomethane	ND< 9.75
Bromoform	ND< 9.75
Carbon Tetrachloride	ND< 9.75
Chloroethane	ND< 9.75
Chloromethane	ND< 9.75
2-Chloroethyl vinyl Ether	ND< 9.75
Chloroform	ND< 9.75
Dibromochloromethane	ND< 9.75
1,1-Dichloroethane	ND< 9.75
1,2-Dichloroethane	ND< 9.75
1,1-Dichloroethene	ND< 9.75
cis-1,2-Dichloroethene	ND< 9.75
trans-1,2-Dichloroethene	ND< 9.75
1,2-Dichloropropane	ND< 9.75
cis-1,3-Dichloropropene	ND< 9.75
trans-1,3-Dichloropropene	ND< 9.75
Methylene chloride	ND< 24.4
1,1,2,2-Tetrachloroethane	ND< 9.75
Tetrachloroethene	ND< 9.75
1,1,1-Trichloroethane	ND< 9.75
1,1,2-Trichloroethane	ND< 9.75
Trichloroethene	ND< 9.75
Trichlorofluoromethane	ND< 9.75
Vinyl chloride	ND< 9.75

Aromatics	Results in ug / Kg
Benzene	ND< 9.75
Chlorobenzene	ND< 9.75
Ethylbenzene	ND< 9.75
Toluene	ND< 9.75
m,p-Xylene	ND< 9.75
o-Xylene	ND< 9.75
Styrene	ND< 9.75
1,2-Dichlorobenzene	ND< 9.75
1,3-Dichlorobenzene	ND< 9.75
1,4-Dichlorobenzene	ND< 9.75

Ketones	Results in ug / Kg
Acetone	293
2-Butanone	ND< 24.4
2-Hexanone	ND< 24.4
4-Methyl-2-pentanone	ND< 24.4

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 24.4
Vinyl acetate	ND< 24.4

ELAP Number 10958

Method: EPA 8260B

Data File: V40717.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
Surrogate outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

**PARADIGM**

ENVIRONMENTAL SERVICES, INC.

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**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**Client: **Delphi**Client Job Site: Metzger Tank Farm  
ExcavationClient Job Number: 70014-063  
Field Location: STF-SW-B3-E  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3399

Lab Sample Number: 11390

Date Sampled: 11/07/2006

Date Received: 11/07/2006

Date Analyzed: 11/10/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 9.75	1,2,4-Trimethylbenzene	729
sec-Butylbenzene	13.9	1,3,5-Trimethylbenzene	207
tert-Butylbenzene	ND< 9.75		
Isopropylbenzene	17.1		
Naphthalene	ND< 24.4		

ELAP Number 10958

Method: EPA 8260B

Data File: V40717.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

063399V1.XLS

### Volatile Analysis Report for Soils/Solids/Sludges

 Client: **Delphi**

Client Job Site: Metzger Tank Farm  
 Excavation  
 Client Job Number: 70014-063  
 Field Location: STF-SW-B4-W  
 Field ID Number: N/A  
 Sample Type: Soil

Lab Project Number: 06-3399  
 Lab Sample Number: 11391  
 Date Sampled: 11/07/2006  
 Date Received: 11/07/2006  
 Date Analyzed: 11/10/2006

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 166
Bromomethane	ND< 166
Bromoform	ND< 166
Carbon Tetrachloride	ND< 166
Chloroethane	ND< 166
Chloromethane	ND< 166
2-Chloroethyl vinyl Ether	ND< 166
Chloroform	ND< 166
Dibromochloromethane	ND< 166
1,1-Dichloroethane	ND< 166
1,2-Dichloroethane	ND< 166
1,1-Dichloroethene	ND< 166
cis-1,2-Dichloroethene	ND< 166
trans-1,2-Dichloroethene	ND< 166
1,2-Dichloropropane	ND< 166
cis-1,3-Dichloropropene	ND< 166
trans-1,3-Dichloropropene	ND< 166
Methylene chloride	ND< 414
1,1,2,2-Tetrachloroethane	ND< 166
Tetrachloroethene	ND< 166
1,1,1-Trichloroethane	ND< 166
1,1,2-Trichloroethane	ND< 166
Trichloroethene	ND< 166
Trichlorofluoromethane	ND< 166
Vinyl chloride	ND< 166

ELAP Number 10958

Method: EPA 8260B

Aromatics	Results in ug / Kg
Benzene	ND< 166
Chlorobenzene	ND< 166
Ethylbenzene	885
Toluene	ND< 166
m,p-Xylene	1,730
o-Xylene	475
Styrene	ND< 166
1,2-Dichlorobenzene	ND< 166
1,3-Dichlorobenzene	ND< 166
1,4-Dichlorobenzene	ND< 166

Ketones	Results in ug / Kg
Acetone	ND< 828
2-Butanone	ND< 414
2-Hexanone	ND< 414
4-Methyl-2-pentanone	ND< 414

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 414
Vinyl acetate	ND< 414

Data File: V40720.D

Comments: ND denotes Non Detect  
 ug / Kg = microgram per Kilogram  
 Surrogate outliers indicate probable matrix interference

Signature:

  
 Bruce Hoegestege Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

063399V2.XLS

**PARADIGM**

ENVIRONMENTAL SERVICES, INC.

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**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**Client: DelphiClient Job Site: Metzger Tank Farm  
ExcavationClient Job Number: 70014-063  
Field Location: STF-SW-B4-W  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 06-3399

Lab Sample Number: 11391

Date Sampled: 11/07/2006

Date Received: 11/07/2006

Date Analyzed: 11/10/2006

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 166	1,2,4-Trimethylbenzene	E 81,300
sec-Butylbenzene	11,400	1,3,5-Trimethylbenzene	E 45,100
tert-Butylbenzene	ND< 166		
Isopropylbenzene	12,800		
Naphthalene	2,490		

ELAP Number 10958

Method: EPA 8260B

Data File: V40720.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

063399V2.XLS

**PARADIGM**

ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**Client: **Delphi**

Client Job Site: Metzger Tank Farm Excavation

Lab Project Number: 06-3399

Client Job Number: 70014-063

Lab Sample Number: 11390

Field Location: STF -SW-B3-E

Date Sampled: 11/07/2006

Field ID Number: N/A

Date Received: 11/07/2006

Sample Type: Soil

Date Analyzed: 11/09/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 334
Acenaphthylene	ND< 334
Anthracene	ND< 334
Benzo (a) anthracene	ND< 334
Benzo (a) pyrene	ND< 334
Benzo (b) fluoranthene	ND< 334
Benzo (g,h,i) perylene	ND< 334
Benzo (k) fluoranthene	ND< 334
Chrysene	ND< 334
Dibenz (a,h) anthracene	ND< 334
Fluoranthene	ND< 334
Fluorene	ND< 334
Indeno (1,2,3-cd) pyrene	ND< 334
Naphthalene	ND< 334
Phenanthrene	ND< 334
Pyrene	ND< 334

ELAP Number 10958

Method: EPA 8270C

Data File: S32047.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

Bruce Hoogesteger: Technical Director

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063399s1.xls

**PARADIGM**

ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**Client: Delphi

Client Job Site: Metzger Tank Farm Excavation

Lab Project Number: 06-3399

Client Job Number: 70014-063

Lab Sample Number: 11391

Field Location: STF -SW-B4-W

Date Sampled: 11/07/2006

Field ID Number: N/A

Date Received: 11/07/2006

Sample Type: Soil

Date Analyzed: 11/09/2006

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 336
Acenaphthylene	ND< 336
Anthracene	ND< 336
Benzo (a) anthracene	ND< 336
Benzo (a) pyrene	ND< 336
Benzo (b) fluoranthene	ND< 336
Benzo (g,h,i) perylene	ND< 336
Benzo (k) fluoranthene	ND< 336
Chrysene	ND< 336
Dibenz (a,h) anthracene	ND< 336
Fluoranthene	ND< 336
Fluorene	ND< 336
Indeno (1,2,3-cd) pyrene	ND< 336
Naphthalene	935
Phenanthrene	ND< 336
Pyrene	ND< 336

ELAP Number 10958

Method: EPA 8270C

Data File: S32048.D

Comments: ND denotes Non Detect

ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

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063399S2.XLS

# PARADIGM ENVIRONMENTAL SERVICES, INC.

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

## CHAIN OF CUSTODY

PROJECT NAME/SITE NAME:  
Metzger Tank Farm  
Excavation

REPORT TO:		INVOICE TO:		LAB PROJECT #:	CLIENT PROJECT #:
COMPANY: Delphi	COMPANY: Delphi	ADDRESS: Lexington Ave.		06-3399	70014-063
ADDRESS: Lexington Ave	ADDRESS: Lexington Ave.	CITY: Rochester STATE: NY ZIP:		TURNAROUND TIME: (WORKING DAYS)	
CITY: Rochester STATE: NY ZIP:	CITY: Rochester STATE: NY ZIP:	PHONE: 585-647-4766 FAX: 585-647-4766		STD OTHER	
PHONE: 585-647-4766 FAX: 585-647-4766	PHONE: 585-647-4766 FAX: 585-647-4766	ATTN: Rick Eisenman		QUOTE #:	
ATTN: Rick Eisenman		COMMENTS:		1 2 3 4 5	

### REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONCENTRATIONS	REMARKS	PARADIGM LAB SAMPLE NUMBER
11/7/06	09:20		X	STF-SW-B3-E	S	2		11390
21/7/06	14:10		X	STF-SW-B4-W	S	2		11391
3								
4								
5								
6								
7								
8								
9								
10								

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

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Preservation:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Holding Time:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Temperature:	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
Comments: 17°C	

Smt J Lee  
 Sampled By: [Signature] Date/Time: 11/7/06 09:20  
 Relinquished By: [Signature] Date/Time: 11/7/06 14:30  
 Received By: Elizabeth A. Honch Date/Time: 11/7/06 15:35  
 Received @ Lab By: [Signature] Date/Time:

Total Cost:

P.I.F.