RI/FS PROGRESS REPORT #15
VALEO FORMER GM-DELCO CHASSIS FACILITY SITE
ROCHESTER, NEW YORK
REGISTRY SITE #8-28-099

by

Haley & Aldrich of New York
Rochester, New York

for

General Motors Corporation
Pontiac, Michigan

File No. 70436-274
8 August 2006

HALEY&
ALDRICH

Haley & Aldrich of New York
200 Town Centre Dr.
Suite 2
Rochester, NY 14623-4264

Tel: 585.359.9000
Fax: 585.359.4650
HaleyAldrich.com

HALEY& ALDRICH

8 August 2006
File No. 70436-277

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

Attention: Regional Hazardous Waste Remediation Engineer

Subject: RI/FS Progress Report No. 15
Site No. 8-28-099, EPA ID No. NYD002215226
Valeo Former GM – Delco Chassis Facility
1555 Lyell Avenue, Rochester, New York

Gentlemen and Ladies:

This letter presents a progress report on the Remedial Investigation and Feasibility Study (RI/FS) of NYSDEC Registry Site No. 8-28-099, the Valeo Former GM – Delco Chassis Facility located at 1555 Lyell Avenue in the City of Rochester, Monroe County, New York (the site). This report covers the period from May through July 2006.

This report is submitted on behalf of General Motors Corporation (GM). It has been prepared in accordance with the terms of an Order On Consent between NYSDEC and GM ("RI/FS Order," Index # B8-0543-98-08).

RI/FS ACTIVITIES

Activities conducted during the reporting period included a soil vapor survey and soil sampling in an area inside the manufacturing building. These activities were conducted to follow up on the results of the soil vapor intrusion (SVI) assessment performed at the site during the last reporting period, and were conducted in accordance with a sampling plan submitted for the Department's review in the last progress report (10 May 2006). The soil-vapor survey and soil sampling were conducted in the vicinity of SVI-3, the SVI assessment location at which concentrations of volatile organic compounds (VOCs) indicative of potential soil contamination had been detected in sub-slab soil vapor.

Soil Vapor Survey

The purpose of the soil-vapor survey was to delineate the extent of elevated VOCs in soil vapor around SVI-3. The SVI-3 location and 17 surrounding locations (SVI-3-A through -L and SVI-3-N, -P, -Q, -T, and U) were sampled by Haley & Aldrich on 21 June 2006. Soil vapor survey sample locations are shown on the attached Figure 1.

Soil vapor samples were collected by drilling through the concrete floor slab and then advancing a hole approximately 2 feet below the slab (2.5 feet below floor level) using a steel slam-bar tool. A hollow stainless-steel probe was then inserted in the hole and the floor slab was sealed around the probe using hydrated bentonite. Soil vapor was extracted from the subsurface through the probe into a Tedlar™ sample bag using a vacuum-canister system. The soil vapor sample was collected after two sample-bag-volumes of soil vapor were purged to assure a representative vapor sample. Samples were analyzed for VOCs by Haley & Aldrich on a Hewlett Packard 5890 Series II gas chromatograph. All samples were analyzed for chlorinated ethene, chlorinated ethane and BTEX compounds (benzene, toluene, ethyl benzene, and xylene).

The floor slab at each sample location was repaired with concrete after the sampling was completed. The sampling probe was decontaminated between sampling points, and disposable tubing and a new clean sample bag were used for each sample.

Soil-vapor sample analysis results are presented on Table 1. Data summary tables showing the compounds and concentrations detected are also presented on the attached Figure 1 with a summary of previous investigation data for soil, groundwater, and LNAPL at locations in the vicinity of SVI-3.

As shown on Table 1 and Figure 1, the soil vapor sample analysis results for the SVI-3 location were comparable to and consistent with the April 2006 sub-slab vapor sample from SVI-3. Elevated VOCs in soil vapor (concentrations of 1,300,000 to 5,100,000 micrograms per cubic meter (ug/m3)) were found to be limited to an area approximately 50 to 60 feet square that encompassed SVI-3 and sample locations to the north and west (A, B, and C). VOC concentrations detected in surrounding samples located 20 to 50 feet beyond that area were one to four orders of magnitude lower.

Soil Sampling

Follow-up soil sampling was performed by Haley & Aldrich on 7 July 2006. Sampling was performed at the SVI-3-B location (test boring B-601) and at SVI-3 (test boring B-602), which were the two soil-vapor survey locations with the highest soil-vapor VOC concentrations.

Sampling, field screening, and lab analysis was performed in accordance with the RI/FS Work Plan for the site and the plans specified in the May 2006 progress report. Test boring services were provided by Nothnagle Drilling of Scottsville, New York. Laboratory analysis was performed by Columbia Analytical Services of Rochester, New York, an accredited, ELAP-certified environmental laboratory.

Continuous sampling to the top of bedrock was conducted using direct-push sampling equipment. Bedrock was encountered at relatively shallow depths in both borings (5.6 and 6.3 feet). The fill section in the overburden was 3 feet thick at both locations, and there was

no ash and cinders layer in the fill at either location. An organic-rich buried topsoil or swamp-deposit layer was present beneath the fill at both locations. Test boring logs and a record of VOC field monitoring are presented in Appendix A.

VOC field-screening was performed to select sample intervals for laboratory analysis. Seven soil samples were submitted for analysis of TCL VOCs by USEPA method 8260. The laboratory analysis report is presented in the attached Appendix B.

Soil sample analysis results are presented on Table 2 and summarized on Figure 1. Relatively low concentrations of up to 5 milligrams per kilogram (mg/kg) of cis-1,2-dichloroethene (DCE) and 0.02 mg/kg of trichloroethene (TCE) were detected in the samples. Concentrations were highest in the buried topsoil intervals.

Discussion of Results

The results of the SVI follow-up activities indicate that the extent of contamination causing high concentrations of VOCs in sub-slab vapor at SVI-3 is limited to an area approximately 50 to 60 feet across. The results indicate that there may have been a minor past release of chlorinated VOCs to the soils in this area, perhaps at a point somewhere between SVI-3 and SVI-3-B. However, the results indicate that the area does not represent a major VOC source area.

As described in the last progress report, the April 2006 SVI sampling results showed that chlorinated ethenes were absent in indoor air at the SVI-3 location and that other VOC concentrations detected in indoor air were below applicable NYSDOH guidelines. The follow-up sampling described in this report indicates that the subsurface contamination in the SVI-3 area is limited to a small area and that contaminant concentrations in soil are relatively low. The data indicate that current conditions do not warrant immediate implementation of interim remedial measures in the SVI-3 area.

NYSDOH's generic soil vapor intrusion guidance recommends mitigation in areas where TCE concentrations in sub-slab vapor exceed 250 ug/m3, as they do at SVI-3, regardless of the current indoor air conditions. The guidance makes this recommendation in order to protect against potential vapor intrusion. However, the NYSDOH guidance is based on protection of health in a generic residential setting, which is a setting that has floor, foundation, vapor-attenuation and air-circulation conditions that are different than those at the site. The guidance states that it may be necessary to modify recommended actions to accommodate building-specific conditions and/or site-specific conditions. We therefore plan to use the indoor air, sub-slab vapor, soil vapor, and soil data collected during the last two quarters to re-evaluate the potential health risks associated with potential soil vapor intrusion at the site.

UPCOMING RI/FS ACTIVITIES

No further sampling is planned for the remedial investigation of the site. Further assessment of the potential health risks associated with soil vapor intrusion and evaluation of what actions should be taken to address sub-slab vapor conditions will be performed during the next reporting period. Work planned for the next reporting period also includes preparation of the draft Feasibility Study report.

CITIZEN PARTICIPATION ACTIVITIES

No Citizen Participation activities were conducted during the reporting period, and none are planned for the upcoming reporting period. The public repository of project-related documents at the Lyell Branch of the Rochester Public Library will be updated with this progress report.

CLOSING

Please feel free to contact us if you have any questions about this report.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

Jeffrey E. Lorey
Vice President

Thomas D. Wells
Senior Environmental Geologist

Attachments:

Table 1 - Summary of SVI-3 Area Soil Vapor Sample Analysis Results
Table 2 - Summary of SVI-3 Area Soil Sample Analysis Results
Figure 1 – Plan Showing Sample Analysis Results for SVI-3 Area Follow-up Activities and Previous Sampling in Surrounding Areas
Appendix A – Test Boring Logs and Field Monitoring Forms
Appendix B – Laboratory Analysis Report

c:
General Motors Corporation – M. Dedyne
Environ – C. Y. Jeng
Maguire Properties, Inc. – D. Maguire
NYSDEC – G. Bailey, E. Belmore
MCDOH - R. Elliott
NYSDOH – M. Forcucci

Table 1

Summary of SVI-3 Area Soil Vapor Sample Analysis Results
Former GM Delco Chassis Facility Site
Rochester, New York

Sample Name	SVI-3			A	B	C	D	E	F	G
Sample Location	11 ' South and 30' East of column R-19			10' S and 8' E of R-19	20' N and 7' E of R-19	15' N and 30' E of R-19	0.5' N and 4' E of Q-19	10' N and 4' E of P-19	0.5' N and 20' E of Q-22	0' N/S and 20' E of R-22
Matrix	Sub-slab vapor	Soil vapor to 24 " below slab		Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab
Sample Date	4/11/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006
Lab	CAS	H&A	H&A	H&A	H&A	H&A	H&A	H&A	H&A	H&A
Method	TO-15	GC	GC	GC	GC	GC	GC	GC	GC	GC
Concentration units	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
Injection volume	- -	500 uL	Re-analysis w/ 250 uL	500 uL	250 uL	500 uL	500 uL	500 uL	500 uL	500 uL
Compound name										
Tetrachloroethene	ND <7,000	ND <200	ND <400	ND <200	450	ND <200	ND <200	ND <200	ND <200	ND <200
Trichloroethene	220,000	332,000	320,000	13,500	144,000	82,900	18,900	6,220	3,200	210
cis-1,2-Dichloroethene	1,700,000	2,625,000	2,408,000	1,227,000	4,555,000	1,269,000	150,000	51,100	31,500	19,200
trans-1,2-Dichloroethene	60,000	85,000	79,000	89,000	191,000	42,700	220	ND <200	ND <200	ND <200
Vinyl Ch;oride	ND <7,000	6,610	4,720	7,680	239,000	13,700	ND <200	ND <200	ND <200	ND <200
1,1-Dichloroethene	ND <7,000	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
1,1,1-Trichloroethane	ND <7,000	ND <200	ND <400	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200
1,1-Dichloroethane	ND <7,000	ND <200	ND <400	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200
Chloroform	ND <7,000	ND <200	ND <400	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200
Methylene Chloride	ND <7,000	ND <200	ND <400	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200
Benzene	ND <7,000	ND <200	ND <400	ND <200	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200
Toluene	ND <7,000	ND <200	ND <400	1,180	ND <400	ND <200	ND <200	ND <200	1,840	ND <200
Ethylbenzene	ND <7,000	700	1,240	1,200	1,440	ND <200	ND <200	ND <200	ND <200	ND <200
o-Xylene	ND <7,000	420	ND <400	ND <200	2,160	ND <200	ND <200	ND <200	ND <200	ND <200
m,p-Xylenes	8,600	1,980	2,080	2,360	ND <200	400	580	ND <200	520	ND <200
MEK	ND <7,000	ND <200	ND <400	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
MTBE	ND <7,000	ND <200	ND <400	ND <400	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Total VOCs	1,988,600	3,051,710	2,815,040	1,341,920	5,133,050	1,408,700	169,700	57,320	37,060	19,410

Sample Name	H	I	J	K	L	N	P	Q	T	U
Sample Location	4' N and 20' E of S-22	5' N and 30' W of S-22	2' N and 8' E of S-19	2' N and 30' E of S-19	6' N and 4' E of S-16	4' N and 40' E of R-16	12' S and 1' E of Q-16	4' N and 10' E of R-16	27' N and 26' E of T-19	27' N and 20' W of T-19
Matrix	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab	Soil vapor to 24 " below slab
Sample Date	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006	6/21/2006
Lab	H&A	H&A	H&A	H&A	H&A	H&A	H&A	H&A	H&A	H&A
Method	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC
Concentration units	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
Injection volume	500 uL	500 uL	500 uL	500 uL	500 uL	500 uL	500 uL	500 uL	500 uL	500 uL
Compound name										
Tetrachloroethene	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	480	ND <200	ND <200	ND <200
Trichloroethene	1,240	ND <200	6,260	1,100	ND <200	1,930	ND <200	1,980	ND <200	ND <200
cis-1,2-Dichloroethene	12,600	6,410	410	1,000	ND <200	1,390	ND <200	2,210	660	ND <200
trans-1,2-Dichloroethene	ND <200	ND <200	ND <200	ND <200	ND <200	240	ND <200	240	ND <200	ND <200
Vinyl Ch;oride	3,520	ND <200	ND <200	ND <200	1,120	ND <200	200	340	ND <200	ND <200
1,1-Dichloroethene	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
1,1,1-Trichloroethane	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
1,1-Dichloroethane	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Chloroform	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Methylene Chloride	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Benzene	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Toluene	ND <200	540	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Ethylbenzene	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
o-Xylene	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
m,p-Xylenes	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
MEK	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
MTBE	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200	ND <200
Total VOCs	17,360	6,950	6,670	2,100	1,120	3,560	680	4,770	660	0

Table 2

Summary of SVI-3 Area Soil Sample Analysis Results
Former GM Delco Chassis Facility Site
Rochester, New York

Sample Location	B-601				B-602		
Sample Depth	0.8-1.8 ft.	3.6-4 ft.	4-4.8 ft.	5-5.6 ft.	1-3.6 ft.	3.7-5 ft.	5-6.3 ft.
Compounds Analyzed	Concentrations in micrograms per kilogram (parts per billion, PPB)						
1,1,1-Trichloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,1,2,2-Tetrachloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,1,2-Trichloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,1-Dichloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,1-Dichloroethene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,2-Dichloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
1,2-Dichloropropane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
2-Butanone	ND (<22)	ND (<1700)	ND (<12)	ND (<12)	ND (<11)	ND (<1500)	ND (<12)
2-Hexanone	ND (<22)	ND (<1700)	ND (<12)	ND (<12)	ND (<11)	ND (<1500)	ND (<12)
4-Methyl-2-Pentanone	ND (<22)	ND (<1700)	ND (<12)	ND (<12)	ND (<11)	ND (<1500)	ND (<12)
Acetone	ND (<43)	ND (<3300)	85	60	ND (<21)	ND (<3000)	54
Benzene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Bromodichloromethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Bromoform	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Bromomethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Carbon Disulfide	ND (<22)	ND (<1700)	ND (<12)	ND (<12)	ND (<11)	ND (<1500)	ND (<12)
Carbon Tetrachloride	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Chlorobenzene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Chloroethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Chloroform	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Chloromethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
cis-1,2-Dichloroethene	380	5100	ND (<5.8)	21	100	1200	ND (<5.9)
cis-1,3-Dichloropropene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Dibromochloromethane	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Ethylbenzene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
m,p-Xylenes	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Methylene Chloride	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
o-Xylene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Styrene (Monomer)	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Tetrachloroethene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Toluene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Trans-1,2-Dichloroethene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Trans-1,3-Dichloropropene	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)
Trichloroethene	23	ND (<840)	ND (<5.8)	ND (<6.2)	14	ND (<750)	ND (<5.9)
Vinyl Chloride	ND (<11)	ND (<840)	ND (<5.8)	ND (<6.2)	ND (<5.3)	ND (<750)	ND (<5.9)

ND = not detected above the quantitation limit shown.

Appendix A

Test Boring Logs and Field Monitoring Forms

TEST BORING REPORT

Boring No. B-601

Project RI/FS Former Delco Chassis Site
Client GENERAL MOTORS CORPORATION
Contractor Nothnagle Drilling

File No. 70436-277
Sheet No. 1 of 1
Start July 7, 2006
Finish July 7, 2006
Driller N. Short
H&A Rep. D. Nostrant
Elevation 535.0
Datum RCD
Location 20 ft. N, 8 ft. E. of column R-19

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	GP	-	Rig Make & Model: Gus Peck Mite-e-mite
Inside Diameter (in.)	3 1/4	1 1/2	-	Bit Type: None
Hammer Weight (lb.)	-	140	-	Drill Mud: None
Hammer Fall (in.)	-	30	-	Casing: None
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)		Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0		G1 45/48	0.0 4.0	NO WELL INSTALLED	534.2		-CONCRETE-											
					0.8	ML	Brown, SILT with sand (ML), mps 25mm, no odor, damp. -FILL-	PID = 50 ppm		10	5	10	15	60		L	L	L
					531.4													
		G2 16/19	4.0 5.6		3.6	ML	Gray-brown-black, sandy SILT (ML), mps 5mm, no odor, damp, trace organics, rootlets. -BURIED TOPSOIL-					10	20	70		L	L	L
5					529.8													
					5.2	ML	Light brown, sandy SILT (ML), mps 15mm, no odor, damp, trace clay, bedrock chips at bottom of sample. -LACUSTRINE-	PID = 20 ppm		5	5	5	15	70		L	N	L
					529.4													
					5.6		Observed refusal at 5.6 ft.											
					528.5		-BEDROCK-											
					6.5		Observed auger refusal at 6.5 ft. Bottom of boring at 6.5 ft.											

Note:
1. PID readings represent maximum reading for each sample.
2. Boring backfilled with auger cuttings and concrete placed to grade.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water
					DRY

Sample Identification

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (lin. ft.) 6.5
Rock Cored (lin. ft.) --
Samples 2G

Boring No. B-601

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3APJD USCSLIB4.GLB USCSTC3A.GDT G:\PROJECTS\70436\277\FIELD\70436-277TB.GPJ Jul 19, 06

TEST BORING REPORT

Boring No. B-602

Project RI/FS Former Delco Chassis Site
Client GENERAL MOTORS CORPORATION
Contractor Nothnagle Drilling

File No. 70436-277
Sheet No. 1 of 1
Start July 7, 2006
Finish July 7, 2006
Driller N. Short
H&A Rep. D. Nostrant
Elevation 535.0
Datum RCD
Location 10 ft. S, 30 ft. E of column R-19

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	HSA	GP	-	Rig Make & Model: Gus Peck Mite-e-mite
Inside Diameter (in.)	3 1/4	1 1/2	-	Bit Type: None
Hammer Weight (lb.)	-	140	-	Drill Mud: None
Hammer Fall (in.)	-	30	-	Casing: None
				Hoist/Hammer: Winch Safety Hammer

Depth (ft.)	SPT[1]	Sample No. & Rec. (in.)	Sample Depth (ft.)	Well Diagram	Elev./Depth (ft.)	USCS Symbol	Visual-Manual Identification and Description (Density/consistency, color, GROUP NAME, max. particle size[2], structure, odor, moisture, optional descriptions, geologic interpretation)		Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							-CONCRETE-											
					534.0													
		G1 42/48	1.0 5.0		1.0	ML	Brown, SILT with sand (ML), mps 35mm, no odor, damp.	PID = 8 ppm		10	5	5	10	70		L	N	N
							-FILL-	PID = 15 ppm										
					531.4													
				NO WELL INSTALLED	3.6	ML	Gray-brown-black, SILT (ML), mps 1mm, no odor, damp, trace clay, organics, rootlets.	PID = 43 ppm				5	10	85		L	L	L
							BURIED TOPSOIL-	PID = 60 ppm										
5					530.0													
		G2 16/16	5.0 6.3		5.0	SM	Brown, poorly-graded, silty SAND (SM), mps 1mm, no odor, damp.	PID = 89 ppm				10	80	10		N	N	N
							-LACUSTRINE-											
							Observed sampler refusal at 6.3 ft.	PID = 20 ppm										
							Bottom of boring at 6.3 ft.											
							Note: 1. Boring backfilled with auger cuttings and concrete placed to grade.											

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft.) to: Bottom of Casing	Bottom of Hole	Water
					DRY

Sample Identification

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (lin. ft.) 6.3
Rock Cored (lin. ft.) --
Samples 2G

Boring No. B-602

Field Tests: Dilatancy: R-Rapid, S-Slow, N-None Plasticity: N-Nonplastic, L-Low, M-Medium, H-High
Toughness: L-Low, M-Medium, H-High Dry Strength: N-None, L-Low, M-Medium, H-High, V-Very High

[1]SPT = Sampler blows per 6 in. [2]Maximum particle size (mm) is determined by direct observation within the limitations of sampler size (in millimeters).

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

USCS_TB3APID USCSLIB4.GLB USCSTC3A.GDT G:\PROJECTS\70436\277\FIELD\70436-277TB.GPJ Jul 19, 06

HALEY & ALDRICH

RECORD OF FIELD MONITORING

B-601, B-602

PROJECT	RI/FS	**H&A FILE NO.**	70436-277
LOCATION	Former GM-Delco Chassis	**PROJECT MGR.**	T. Wells
CLIENT	REALM	**FIELD REP**	D. Nostrant
CONTRACTOR	Nothnagle Drilling	**DATE**	7/7/2006

Project Description: RI/FS

Task Description: Soil Borings

Instrument Type: Mini Rae 2000 PID Serial Number:

(OVA, LEL, PID, etc) 2) Serial Number:

Calibration and/or operational check completed as per manufacturers instructions: ☑ Yes ☐ No

Time completed: 0845, 07/07/06

Weather conditions: Indoors 75°

Reading Type:[1]	Level: (ppm or indicate units)	Time:	PPE Level:[2]
(B-601) S, P, BZ	0.0	0943/prior to removing concrete core	"D"
S, P, BZ	0.0	1010/remove concrete	upgraded to "B" (ND)
S, P, BZ	0.0	1015/core lower layer	B-ND
S, P, BZ	0.0	1025/core lower layer	B-ND
S, P, BZ	0.0	1037-remove core	B-ND
S, P, BZ	0.0	1037-vacuum exhaust	B-ND
S, P, BZ	0.0	1100/begin sampling	B-ND
S, P, BZ	0.0	1140	downgraded to D
S	2.2	1150-began augering	D
S	8.0	1155-augering	D
(B-602)	----------1225 BEGIN CORING CONCRETE FLOOR----------		D
S, P, BZ	0.0	1235 remove concrete core	D
S, P, BZ	0	1240-1310	D

1. Key to Reading Types:
   Breathing Zone-BZ
   Perimeter-P
   Surface-S

2. EPA Levels B, C or D

Comments: ND-Nothnagle Drilling

Note: performed continous perimeter monitoring, all readings non-detect.

The following information should be maintained for all projects requiring air monitoring.

Appendix B

Laboratory Analysis Report

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

July 20, 2006

H&A OF NY
JUL 24 2006
RECEIVED

Mr. Tom Wells
Haley & Aldrich of New York
200 Town Centre Drive
Suite 2
Rochester, NY 14623-4264

PROJECT:#70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Submission #:R2632476

Dear Mr. Wells

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Karen Bunker

Karen Bunker
Project Manager

Enc.

1 Mustard St.• Suite 250 • Rochester, NY 14609 • Tele:(585)288-5380 • Fax:(585)288-8475

1 Mustard Street, Suite 250 Rochester, NY 14609-6925 (585) 288-5380 (585) 288-8475 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 28, 2006

Mr. Tom Wells
Haley & Aldrich of New York
200 Town Centre Drive Ste. 2
Rochester , NY 14623-4264

Re: #70436-277 RI/FS Former GM Delco Chassis Site
CAS Submission # R2632476
Revised Form

Dear Mr. Wells,

Enclosed is a revised Trip Blank data report form for the above referenced project. As per your phone call, the units for this sample should be ug/l (ppb). The replacement page is attached and can be inserted into the original package using the page number in the bottom right hand corner. No data has changed as a result of this revision, only the units were affected.

We regret any inconvenience this may have caused in your review of the data. Please contact me at (585)-288-5380 if you have questions regarding this information.

Sincerely,
COLUMBIA ANALYTICAL SERVICES

Karen Bunker
Project Manager

Enc.

Columbia Analytical Services Inc.
1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Lab Submission # : R2632476
Project Manager : Karen Bunker
Reported : 07/20/06

Report Contains a total of 27 pages

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Michael K. Perry

Columbia Analytical Services inc.

CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2632476

Lab ID	Client ID
918614	B-601-S1
918615	B-601-S2
918616	B-601-S3
918617	B-601-S4
918618	B-602-S1
918619	B-602-S2
918620	B-602-S3
918621	TRIP BLANK

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.

Columbia Analytical Services INC.
An Employee - Owned Company

ACCREDITED IN ACCORDANCE WITH nelac

Ethics Service Quality ACIL 2005 SEAL OF EXCELLENCE PROGRAM Environmental

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
West Virginia ID # 292

Columbia Analytical Services INC.
An Employee - Owned Company

ACCREDITED IN ACCORDANCE WITH nelac

Ethics Service Quality ACIL 2005 SEAL OF EXCELLENCE PROGRAM Environmental

INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). This qualifier may also be used to indicate that there was contamination above the reporting limit in the associated blank. See Narrative for details.
- U - if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D - Spike was diluted out
- E - The reported value is estimated because the serial dilution did not meet criteria.
- J - Estimated Value
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S1

Date Sampled : 07/07/06 11:10 **Order #:** 918614 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	93.0	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S1

Date Sampled : 07/07/06 11:10 **Order #:** 918614 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 93.0

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 2.00			Dry Weight
ACETONE	20	43 U	UG/KG
BENZENE	5.0	11 U	UG/KG
BROMODICHLOROMETHANE	5.0	11 U	UG/KG
BROMOFORM	5.0	11 U	UG/KG
BROMOMETHANE	5.0	11 U	UG/KG
2-BUTANONE (MEK)	10	22 U	UG/KG
CARBON DISULFIDE	10	22 U	UG/KG
CARBON TETRACHLORIDE	5.0	11 U	UG/KG
CHLOROBENZENE	5.0	11 U	UG/KG
CHLOROETHANE	5.0	11 U	UG/KG
CHLOROFORM	5.0	11 U	UG/KG
CHLOROMETHANE	5.0	11 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHANE	5.0	11 U	UG/KG
1,2-DICHLOROETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHENE	5.0	11 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	380	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
1,2-DICHLOROPROPANE	5.0	11 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
ETHYLBENZENE	5.0	11 U	UG/KG
2-HEXANONE	10	22 U	UG/KG
METHYLENE CHLORIDE	5.0	11 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	22 U	UG/KG
STYRENE	5.0	11 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	11 U	UG/KG
TETRACHLOROETHENE	5.0	11 U	UG/KG
TOLUENE	5.0	11 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	11 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	11 U	UG/KG
TRICHLOROETHENE	5.0	23	UG/KG
VINYL CHLORIDE	5.0	11 U	UG/KG
O-XYLENE	5.0	11 U	UG/KG
M+P-XYLENE	5.0	11 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	90	%
TOLUENE-D8	(75 - 128 %)	97	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	97	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S2

Date Sampled : 07/07/06 11:15 **Order #:** 918615 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	86.9	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S2

Date Sampled : 07/07/06 11:15 **Order #:** 918615 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 86.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	85	UG/KG
BENZENE	5.0	5.8 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.8 U	UG/KG
BROMOFORM	5.0	5.8 U	UG/KG
BROMOMETHANE	5.0	5.8 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.8 U	UG/KG
CHLOROBENZENE	5.0	5.8 U	UG/KG
CHLOROETHANE	5.0	5.8 U	UG/KG
CHLOROFORM	5.0	5.8 U	UG/KG
CHLOROMETHANE	5.0	5.8 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.8 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.8 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.8 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.8 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.8 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.8 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.8 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.8 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.8 U	UG/KG
ETHYLBENZENE	5.0	5.8 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	5.8 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	5.8 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.8 U	UG/KG
TETRACHLOROETHENE	5.0	5.8 U	UG/KG
TOLUENE	5.0	5.8 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.8 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.8 U	UG/KG
TRICHLOROETHENE	5.0	5.8 U	UG/KG
VINYL CHLORIDE	5.0	5.8 U	UG/KG
O-XYLENE	5.0	5.8 U	UG/KG
M+P-XYLENE	5.0	5.8 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	97	%
TOLUENE-D8	(75 - 128 %)	96	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	94	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S3

Date Sampled : 07/07/06 11:20 **Order #:** 918616 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	80.5	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S3

Date Sampled : 07/07/06 11:20 **Order #:** 918616 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 80.5

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	60	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	21	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	6.2 U	UG/KG
TOLUENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG
O-XYLENE	5.0	6.2 U	UG/KG
M+P-XYLENE	5.0	6.2 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	99	%
TOLUENE-D8	(75 - 128 %)	100	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	96	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S4

Date Sampled : 07/07/06 11:30 **Order #:** 918617 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	74.8	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-601-S4

Date Sampled : 07/07/06 11:30 **Order #:** 918617 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 74.8

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 125.00			Dry Weight
ACETONE	20	3300 U	UG/KG
BENZENE	5.0	840 U	UG/KG
BROMODICHLOROMETHANE	5.0	840 U	UG/KG
BROMOFORM	5.0	840 U	UG/KG
BROMOMETHANE	5.0	840 U	UG/KG
2-BUTANONE (MEK)	10	1700 U	UG/KG
CARBON DISULFIDE	10	1700 U	UG/KG
CARBON TETRACHLORIDE	5.0	840 U	UG/KG
CHLOROBENZENE	5.0	840 U	UG/KG
CHLOROETHANE	5.0	840 U	UG/KG
CHLOROFORM	5.0	840 U	UG/KG
CHLOROMETHANE	5.0	840 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	840 U	UG/KG
1,1-DICHLOROETHANE	5.0	840 U	UG/KG
1,2-DICHLOROETHANE	5.0	840 U	UG/KG
1,1-DICHLOROETHENE	5.0	840 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5100	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	840 U	UG/KG
1,2-DICHLOROPROPANE	5.0	840 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	840 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	840 U	UG/KG
ETHYLBENZENE	5.0	840 U	UG/KG
2-HEXANONE	10	1700 U	UG/KG
METHYLENE CHLORIDE	5.0	840 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1700 U	UG/KG
STYRENE	5.0	840 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	840 U	UG/KG
TETRACHLOROETHENE	5.0	840 U	UG/KG
TOLUENE	5.0	840 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	840 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	840 U	UG/KG
TRICHLOROETHENE	5.0	840 U	UG/KG
VINYL CHLORIDE	5.0	840 U	UG/KG
O-XYLENE	5.0	840 U	UG/KG
M+P-XYLENE	5.0	840 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	106	%
TOLUENE-D8	(75 - 128 %)	101	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	96	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S1

Date Sampled : 07/07/06 12:50 **Order #:** 918618 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	93.7	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S1

Date Sampled : 07/07/06 12:50 **Order #:** 918618 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 93.7

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	21 U	UG/KG
BENZENE	5.0	5.3 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.3 U	UG/KG
BROMOFORM	5.0	5.3 U	UG/KG
BROMOMETHANE	5.0	5.3 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.3 U	UG/KG
CHLOROBENZENE	5.0	5.3 U	UG/KG
CHLOROETHANE	5.0	5.3 U	UG/KG
CHLOROFORM	5.0	5.3 U	UG/KG
CHLOROMETHANE	5.0	5.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	100	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.3 U	UG/KG
ETHYLBENZENE	5.0	5.3 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
METHYLENE CHLORIDE	5.0	5.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
STYRENE	5.0	5.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.3 U	UG/KG
TETRACHLOROETHENE	5.0	5.3 U	UG/KG
TOLUENE	5.0	5.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.3 U	UG/KG
TRICHLOROETHENE	5.0	14	UG/KG
VINYL CHLORIDE	5.0	5.3 U	UG/KG
O-XYLENE	5.0	5.3 U	UG/KG
M+P-XYLENE	5.0	5.3 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	92	%
TOLUENE-D8	(75 - 128 %)	95	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	91	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S2

Date Sampled : 07/07/06 13:00 **Order #:** 918619 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	82.9	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S2

Date Sampled : 07/07/06 13:00 **Order #:** 918619 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 82.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 125.00			Dry Weight
ACETONE	20	3000 U	UG/KG
BENZENE	5.0	750 U	UG/KG
BROMODICHLOROMETHANE	5.0	750 U	UG/KG
BROMOFORM	5.0	750 U	UG/KG
BROMOMETHANE	5.0	750 U	UG/KG
2-BUTANONE (MEK)	10	1500 U	UG/KG
CARBON DISULFIDE	10	1500 U	UG/KG
CARBON TETRACHLORIDE	5.0	750 U	UG/KG
CHLOROBENZENE	5.0	750 U	UG/KG
CHLOROETHANE	5.0	750 U	UG/KG
CHLOROFORM	5.0	750 U	UG/KG
CHLOROMETHANE	5.0	750 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	750 U	UG/KG
1,1-DICHLOROETHANE	5.0	750 U	UG/KG
1,2-DICHLOROETHANE	5.0	750 U	UG/KG
1,1-DICHLOROETHENE	5.0	750 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	1200	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	750 U	UG/KG
1,2-DICHLOROPROPANE	5.0	750 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	750 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	750 U	UG/KG
ETHYLBENZENE	5.0	750 U	UG/KG
2-HEXANONE	10	1500 U	UG/KG
METHYLENE CHLORIDE	5.0	750 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1500 U	UG/KG
STYRENE	5.0	750 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	750 U	UG/KG
TETRACHLOROETHENE	5.0	750 U	UG/KG
TOLUENE	5.0	750 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	750 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	750 U	UG/KG
TRICHLOROETHENE	5.0	750 U	UG/KG
VINYL CHLORIDE	5.0	750 U	UG/KG
O-XYLENE	5.0	750 U	UG/KG
M+P-XYLENE	5.0	750 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	108	%
TOLUENE-D8	(75 - 128 %)	104	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	97	%

COLUMBIA ANALYTICAL SERVICES

Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S3

Date Sampled : 07/07/06 13:10 **Order #:** 918620 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.3M	1.00	85.1	%	07/17/06	13:15	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : B-602-S3

Date Sampled : 07/07/06 13:10 **Order #:** 918620 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 07/07/06 **Submission #:** R2632476 **Percent Solid:** 85.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	54	UG/KG
BENZENE	5.0	5.9 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.9 U	UG/KG
BROMOFORM	5.0	5.9 U	UG/KG
BROMOMETHANE	5.0	5.9 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.9 U	UG/KG
CHLOROBENZENE	5.0	5.9 U	UG/KG
CHLOROETHANE	5.0	5.9 U	UG/KG
CHLOROFORM	5.0	5.9 U	UG/KG
CHLOROMETHANE	5.0	5.9 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.9 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.9 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.9 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.9 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.9 U	UG/KG
ETHYLBENZENE	5.0	5.9 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	5.9 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	5.9 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.9 U	UG/KG
TETRACHLOROETHENE	5.0	5.9 U	UG/KG
TOLUENE	5.0	5.9 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.9 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.9 U	UG/KG
TRICHLOROETHENE	5.0	5.9 U	UG/KG
VINYL CHLORIDE	5.0	5.9 U	UG/KG
O-XYLENE	5.0	5.9 U	UG/KG
M+P-XYLENE	5.0	5.9 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	101	%
TOLUENE-D8	(75 - 128 %)	97	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	94	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/28/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : TRIP BLANK

Date Sampled : 07/07/06 **Order #:** 918621 **Sample Matrix:** WATER
Date Received: 07/07/06 **Submission #:** R2632476 **Analytical Run** 132404

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(80 - 123 %)	106	%
TOLUENE-D8	(88 - 124 %)	105	%
DIBROMOFLUOROMETHANE	(91 - 115 %)	98	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/28/06

Haley & Aldrich of New York
Project Reference: #70436-277 RI/FS FORMER GM DELCO CHASSIS SITE
Client Sample ID : TRIP BLANK

Date Sampled : 07/07/06 **Order #:** 918621 **Sample Matrix:** WATER
Date Received: 07/07/06 **Submission #:** R2632476 **Analytical Run** 132404

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(80 - 123 %)	106	%
TOLUENE-D8	(88 - 124 %)	105	%
DIBROMOFLUOROMETHANE	(91 - 115 %)	98	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 921430 ANALYTICAL RUN # : 132404

DATE ANALYZED : 07/12/06
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20.0	109	50 - 150
BENZENE	20.0	102	70 - 130
BROMODICHLOROMETHANE	20.0	102	70 - 130
BROMOFORM	20.0	101	70 - 130
BROMOMETHANE	20.0	95	50 - 150
2-BUTANONE (MEK)	20.0	106	50 - 150
CARBON DISULFIDE	20.0	96	70 - 130
CARBON TETRACHLORIDE	20.0	104	70 - 130
CHLOROBENZENE	20.0	104	70 - 130
CHLOROETHANE	20.0	100	70 - 130
CHLOROFORM	20.0	102	70 - 130
CHLOROMETHANE	20.0	103	70 - 130
DIBROMOCHLOROMETHANE	20.0	103	70 - 130
1,1-DICHLOROETHANE	20.0	103	70 - 130
1,2-DICHLOROETHANE	20.0	106	70 - 130
1,1-DICHLOROETHENE	20.0	108	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	104	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	104	70 - 130
1,2-DICHLOROPROPANE	20.0	104	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	105	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	106	70 - 130
ETHYLBENZENE	20.0	105	70 - 130
2-HEXANONE	20.0	102	70 - 130
METHYLENE CHLORIDE	20.0	104	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	108	70 - 130
STYRENE	20.0	100	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	102	70 - 130
TETRACHLOROETHENE	20.0	104	70 - 130
TOLUENE	20.0	100	70 - 130
1,1,1-TRICHLOROETHANE	20.0	105	70 - 130
1,1,2-TRICHLOROETHANE	20.0	102	70 - 130
TRICHLOROETHENE	20.0	100	70 - 130
VINYL CHLORIDE	20.0	100	70 - 130
O-XYLENE	20.0	102	70 - 130
M+P-XYLENE	40.0	100	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 921432 ANALYTICAL RUN # : 132404

DATE ANALYZED : 07/12/06
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20.0	109	50 - 150
BENZENE	20.0	102	70 - 130
BROMODICHLOROMETHANE	20.0	102	70 - 130
BROMOFORM	20.0	101	70 - 130
BROMOMETHANE	20.0	95	50 - 150
2-BUTANONE (MEK)	20.0	106	50 - 150
CARBON DISULFIDE	20.0	96	70 - 130
CARBON TETRACHLORIDE	20.0	104	70 - 130
CHLOROBENZENE	20.0	104	70 - 130
CHLOROETHANE	20.0	100	70 - 130
CHLOROFORM	20.0	102	70 - 130
CHLOROMETHANE	20.0	103	70 - 130
DIBROMOCHLOROMETHANE	20.0	103	70 - 130
1,1-DICHLOROETHANE	20.0	103	70 - 130
1,2-DICHLOROETHANE	20.0	106	70 - 130
1,1-DICHLOROETHENE	20.0	108	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	104	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	104	70 - 130
1,2-DICHLOROPROPANE	20.0	104	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	105	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	106	70 - 130
ETHYLBENZENE	20.0	105	70 - 130
2-HEXANONE	20.0	102	70 - 130
METHYLENE CHLORIDE	20.0	104	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	108	70 - 130
STYRENE	20.0	100	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	102	70 - 130
TETRACHLOROETHENE	20.0	104	70 - 130
TOLUENE	20.0	100	70 - 130
1,1,1-TRICHLOROETHANE	20.0	105	70 - 130
1,1,2-TRICHLOROETHANE	20.0	102	70 - 130
TRICHLOROETHENE	20.0	100	70 - 130
VINYL CHLORIDE	20.0	100	70 - 130
O-XYLENE	20.0	102	70 - 130
M+P-XYLENE	40.0	100	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 922552 ANALYTICAL RUN # : 132577

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	142	50 - 150
BENZENE	20.0	109	70 - 130
BROMODICHLOROMETHANE	20.0	113	70 - 130
BROMOFORM	20.0	109	70 - 130
BROMOMETHANE	20.0	121	50 - 150
2-BUTANONE (MEK)	20.0	130	50 - 150
CARBON DISULFIDE	20.0	98	70 - 130
CARBON TETRACHLORIDE	20.0	110	70 - 130
CHLOROBENZENE	20.0	105	70 - 130
CHLOROETHANE	20.0	108	70 - 130
CHLOROFORM	20.0	108	70 - 130
CHLOROMETHANE	20.0	116	70 - 130
DIBROMOCHLOROMETHANE	20.0	105	70 - 130
1,1-DICHLOROETHANE	20.0	112	70 - 130
1,2-DICHLOROETHANE	20.0	123	70 - 130
1,1-DICHLOROETHENE	20.0	112	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	113	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	109	70 - 130
1,2-DICHLOROPROPANE	20.0	113	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	116	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	119	70 - 130
ETHYLBENZENE	20.0	101	70 - 130
2-HEXANONE	20.0	119	70 - 130
METHYLENE CHLORIDE	20.0	113	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	123	70 - 130
STYRENE	20.0	100	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	114	70 - 130
TETRACHLOROETHENE	20.0	97	70 - 130
TOLUENE	20.0	107	70 - 130
1,1,1-TRICHLOROETHANE	20.0	111	70 - 130
1,1,2-TRICHLOROETHANE	20.0	120	70 - 130
TRICHLOROETHENE	20.0	111	70 - 130
VINYL CHLORIDE	20.0	108	70 - 130
O-XYLENE	20.0	102	70 - 130
M+P-XYLENE	40.0	101	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 921429 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 132404

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(80 - 123 %)	105	%
TOLUENE-D8	(88 - 124 %)	102	%
DIBROMOFLUOROMETHANE	(91 - 115 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 921431 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/12/06			
ANALYTICAL DILUTION: 125.00			Dry Weight
ACETONE	20	2500 U	UG/KG
BENZENE	5.0	630 U	UG/KG
BROMODICHLOROMETHANE	5.0	630 U	UG/KG
BROMOFORM	5.0	630 U	UG/KG
BROMOMETHANE	5.0	630 U	UG/KG
2-BUTANONE (MEK)	10	1300 U	UG/KG
CARBON DISULFIDE	10	1300 U	UG/KG
CARBON TETRACHLORIDE	5.0	630 U	UG/KG
CHLOROBENZENE	5.0	630 U	UG/KG
CHLOROETHANE	5.0	630 U	UG/KG
CHLOROFORM	5.0	630 U	UG/KG
CHLOROMETHANE	5.0	630 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	630 U	UG/KG
1,1-DICHLOROETHANE	5.0	630 U	UG/KG
1,2-DICHLOROETHANE	5.0	630 U	UG/KG
1,1-DICHLOROETHENE	5.0	630 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
1,2-DICHLOROPROPANE	5.0	630 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
ETHYLBENZENE	5.0	630 U	UG/KG
2-HEXANONE	10	1300 U	UG/KG
METHYLENE CHLORIDE	5.0	630 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1300 U	UG/KG
STYRENE	5.0	630 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	630 U	UG/KG
TETRACHLOROETHENE	5.0	630 U	UG/KG
TOLUENE	5.0	630 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	630 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	630 U	UG/KG
TRICHLOROETHENE	5.0	630 U	UG/KG
VINYL CHLORIDE	5.0	630 U	UG/KG
O-XYLENE	5.0	630 U	UG/KG
M+P-XYLENE	5.0	630 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	104	%
TOLUENE-D8	(75 - 128 %)	102	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	94	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 07/20/06

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 922551 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 07/17/06			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(65 - 129 %)	98	%
TOLUENE-D8	(75 - 128 %)	94	%
DIBROMOFLUOROMETHANE	(62 - 133 %)	92	%

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

Columbia Analytical Services INC.
An Employee - Owned Company
www.caslab.com

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475

PAGE 1 OF 1

SR #

CAS Contact

Project Name: RI/FS FORMER GM DELCO CHASSIS SITE
Project Number: 70436-277
Project Manager: T. WELLS
Report CC:
Company/Address: HALEY & ALDRICH OF NY
200 TOWN CENTRE DR
ROCHESTER NY
Phone #: 585-321-42
FAX#: 585-359-4650
Sampler's Signature:
Sampler's Printed Name: DAVID M. NOSTRANT

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
B-601-S1	918614	7/7/06	1110	S	2	X							0.8-1.8
B-601-S2	918615	7/7/06	1115	S	2	X							4.0-4.8
B601-S3	918616	7/7/06	1120	S	2	X							5.0-5.6
B601-S4	918617	7/7/06	1130	S	2	X							3.6-4.0
B602-S1	918618	7/7/06	1250	S	2	X							1.0-3.7
B602-S2	918619	7/7/06	1300	S	2	X							3.7-5.0
B602-S3	918620	7/7/06	1310	S	2	X							5.0-6.3
TRIP BLANK	918621	7/7/06	—	W	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ICE

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ **RUSH** (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X **STANDARD**
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Speicalized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #: R263276

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 10°C
CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature: Rachel Jones	Signature	Signature	Signature	Signature
Printed Name: DAVID M. NOSTRANT	Printed Name: Rachel Jones	Printed Name	Printed Name	Printed Name	Printed Name
Firm: HALEY & ALDRICH	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 7/7/06 1440	Date/Time: 7/7/06 1440	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

#983

Cooler Receipt And Preservation Check Form

Project/Client Haley & Aldrich Submission Number R2632476

Cooler received on 7/7/06 by: RJ **COURIER:** CAS UPS FEDEX VELOCITY (CLIENT)

1.	Were custody seals on outside of cooler?	YES	(NO)			
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO			
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO			
4.	Did any VOA vials have significant air bubbles?	YES	NO	(N/A)		
5.	Were **Ice** or **Ice packs** present?	(YES)	NO			
6.	Where did the bottles originate?	(CAS/ROC)	CLIENT			
7.	Temperature of cooler(s) upon receipt:	10°				
	Is the temperature within 0° - 6° C?:	Yes	Yes	Yes	Yes	Yes
	If No, Explain Below	(No)	No	No	No	No
	Date/Time Temperatures Taken:	7/7/06 @ ~~1645~~ RJ	1445			
	Thermometer ID: 161 or (IR GUN)	Reading From: Temp Blank or (Sample Bottle)				

If out of Temperature, Client Approval to Run Samples 4 hr Rule

PC Secondary Review: KB 7/10/06

Cooler Breakdown: Date: 7/10/06 by: BJ

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added	Final pH
pH	Reagent						
12	NaOH						
2	HNO_3						
2	H_2SO_4						
Residual Chlorine (+/-)	for TCN & Phenol						
5-9**	P/PCBs (608 only)						

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH_____

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2		

Other Comments:
- 7 soil jars empty

PC Secondary Review: KB 7/20/06

H:\SMODOCS\Cooler Receipt v 2.doc