



## MEMORANDUM

TO: Amy Hoeksema REF. NO.: 17307-088005

FROM: Chris Hollingsworth/js/3 DATE: July 29, 2005  
Via E-Mail and U.S. Mail

RE: **Data Quality Assessment and Validation  
LCA South Assembly Site Assessment - Subsurface Investigation Sampling  
General Motors  
Lansing, Michigan**

The following details a quality assessment and validation of the analytical data resulting from the collection of 123 soil samples (excluding quality control samples) from the General Motors LCA South Assembly Site (Site) in Lansing, Michigan, from April 18 to April 28, 2005. The sample summary detailing sample identification, sample location, quality control (QC) samples, and analytical parameters is presented in Table 1. Sample analysis was completed at Merit Laboratories, Inc. in East Lansing, Michigan (Merit), in accordance with the methodologies presented in Table 2. The QC criteria used to assess the data were established by the methods and following documents:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999;
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA 540/R-94-013, February 1994; and
- iii) "Innovative Approaches to Data Validation", USEPA Region III, June 1995.

Full Contract Laboratory Program (CLP)-equivalent raw data deliverables were provided by the laboratory. The data quality assessment and validation presented in the following subsections were performed based on the sample results and supporting quality assurance/quality control (QA/QC) provided.

### Holding Time Period and Sample Analysis

The holding time periods are presented in the analytical methods. All samples were properly cooled after collection and upon receipt at the laboratory. In addition, all samples were prepared and analyzed within the method-required holding times with the exception of ethylene glycol. All ethylene glycol analyses were performed outside the method-required holding time of 14 days; therefore, all ethylene glycol analyses are qualified as estimated (UJ or J).

### Gas Chromatography/Mass Spectrometer (GC/MS) Mass Calibration

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the volatile organic compound (VOC) and semi-volatile organic compound (SVOC) methods require the analysis of the specific tuning compounds bromofluorobenzene (BFB) and decafluorotriphenylphosphine (DFTPP), respectively. The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

Instrument tuning data were reviewed. Tuning compounds were analyzed at the required frequency throughout the VOC and SVOC analysis periods. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

### Initial Calibration – Organic Analyses, GC/MS

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a minimum of a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range.

Calibration data were reviewed for all samples. Linearity of the calibration curve and instrument sensitivity were evaluated against the following criteria:

- i) all relative response factors (RRFs) must be greater than or equal to 0.05; and
- ii) percent relative standard deviation (%RSD) values must not exceed 30 percent or if quadratic/linear regression is used, the correlation coefficient ( $R^2$ ) value must be at least 0.995/0.990, respectively.

Initial calibration standards were analyzed as required and most data showed acceptable sensitivity and linearity for VOCs and SVOCs. VOC and SVOC exceptions are listed below by parameter.

For VOCs, bromomethane showed a relative response factor less than the required factor of 0.05. All associated data were qualified as rejected (see Table 3). In addition, 1,2-dibromo-3-chloropropane showed %RSD values above the method-required limit. All associated data were qualified as estimated (see Table 3).

For SVOCs, the following compounds had %RSDs above 30: 4-chloroaniline; hexachlorocyclopentadiene; 2,4-dinitrophenol; indeno(1,2,3--c,d)pyrene; dibenzo(a,h)anthracene; and benzo(g,h,i)perylene. All associated data were qualified as estimated (see Table 3).

### Initial Calibration - Organics, GC

To quantify compounds of interest, calibration of the GC over a specific concentration range must be performed. The initial calibration for ethylene glycol was performed using a minimum of six points; however, for polychlorinated biphenyls (PCBs) only three Aroclors are calibrated using multiple points. For PCBs, a minimum of a five-point calibration curve is analyzed for Aroclors 1254, 1016, and 1260, while the remaining Aroclors are calibrated using a single point.

Linearity of the calibration curves are acceptable if %RSD values are less than or equal to 20 percent or if the correlation coefficient is greater than 0.995. Retention time windows are also calculated from the initial calibration analyses. These windows are then used to identify all compounds of interest in subsequent analyses.

Initial calibration standards were analyzed at the required frequencies. All retention time and linearity criteria were satisfied.

#### Inductively Coupled Plasma/Mass Spectrometer (ICP/MS) – Mass Calibration and Resolution Checks – Metal Analyses

To ensure adequate mass resolution, identification, and to some degree, sensitivity; the performance of each ICP/MS instrument used for metals analyses was checked prior to calibration before initiating an analysis sequence through the analysis of a tuning solution. The results of the tuning solution analysis were reviewed against the following criteria:

- i) analyze tuning solution a minimum of four times with a %RSD of less than or equal to five for the analytes contained in the tuning solution; and
- ii) the mass resolution must be within 0.1 amu of the true value over the analytical range.

Instrument performance check data were reviewed. The tuning solution was analyzed at the required frequency throughout the analyses. The results of all instrument performance checks were within the acceptance criteria indicating acceptable instrument performance.

#### Initial Calibration – Inorganic Analyses

Initial calibration of the instruments ensures that they are capable of producing satisfactory quantitative data at the beginning of a series of analyses. For ICP and ICP/MS analyses, a calibration blank, and at least one standard must be analyzed at each wavelength to establish the analytical curve. For cold vapor atomic absorption (CVAA) and instrumental wet chemistry analyses, a calibration blank and a minimum of four standards must be analyzed to establish the analytical curve. Resulting correlation coefficients for curves consisting of a blank and four or more standards must be at least 0.995.

After the analyses of the calibration curves, an initial calibration verification (ICV) standard must be analyzed to verify the analytical accuracy of the calibration curves. All analyte recoveries from the analyses of the ICVs must be within the following control limits:

<i>Analytical Method</i>	<i>Inorganic Species</i>	<i>Control Limits (Percent)</i>
ICP and ICP/MS	Metals	90 – 110
CVAA	Mercury	90 – 110
Instrumental Wet Chemistry	Total Organic Carbon (TOC), Sulfate	85 - 115

Upon review of the data, it was determined that all inorganic calibration curves and ICVs were analyzed at the proper frequencies and that all of the above-specified criteria were met. The laboratory effectively demonstrated that instrumentation used for these analyses was properly calibrated prior to sample analyses.

### Continuing Calibration - Organics, GC/MS

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

- i) all RRF values must be greater than or equal to 0.05; and
- ii) percent difference (%D) values must not exceed 25 percent.

Initial calibration standards were analyzed as required and most data showed acceptable sensitivity and linearity for VOCs and SVOCs. VOC and SVOC exceptions are listed below by parameter.

For VOCs, some continuing calibration standards demonstrated low RRF values for bromomethane and 1,2-dibromo-3-chloropropane. All associated data were qualified as rejected (see Table 4). In addition, other continuing calibration standards showed %RSD values above the method-required limit for the following compounds: acetone; 1,2-dibromo-3-chloropropane; and dichlorodifluoromethane (CFC-12). All associated data were qualified as estimated (see Table 4).

For SVOCs, 4-Chloroaniline demonstrated a %RSD value above the method-required limit. All associated data were qualified as estimated (see Table 4).

### Continuing Calibration - Organics, GC

To ensure that the calibration of the instrument is valid throughout the sample analysis period, continuing calibration standards are analyzed and evaluated on a regular basis. To evaluate the continued linearity of the calibration, %D values are calculated for each compound in all continuing standards and assessed against an acceptance criterion of 15 percent.

To ensure that compound retention times do not vary over the analysis period, all retention times must fall within the established retention time windows.

Continuing calibration standards were analyzed at the required frequency and all method criteria were met for analyte linearity.

### Continuing Calibration - Inorganics

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. All analyte recoveries reported for the CCVs were within the specified limits.

### Method Blank Samples

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of sample contamination introduced during analysis. Laboratory blanks are prepared from de-ionized water and analyzed as samples.

For this study, method blanks were analyzed at a minimum frequency of one per analytical batch.

In accordance with the "Guidelines", all sample results greater than the MDL but less than five times the amount detected in the associated blank were qualified as non-detect. The blank results were non-detect for the analytes of interest with the exception of metals and SVOCs. All associated results for metals and SVOCs were qualified as non-detect (see Tables 5 and 6). All remaining investigative samples associated with contaminated laboratory blanks yielded either non-detect concentrations or concentrations greater than five times the associated laboratory blank concentrations for the analytes of interest. Qualification of the remaining sample data was not required on this basis.

### Surrogate Compound Percent Recoveries - Organics

In accordance with the methods employed, all samples, blanks, and standards analyzed for VOCs, SVOCs, ethylene glycol, and PCBs, were spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency and are assessed against method control limits. For the SVOC method, it is acceptable for one surrogate recovery per fraction (base neutral or acid phenolic) to fall outside of these limits, provided it is greater than 10 percent.

Most surrogate recoveries were within the laboratory specified control limits demonstrating acceptable analytical accuracy. The PCB surrogate decachlorobiphenyl (DCB) exceeded the required limits and all associated data were qualified as estimated (see Table 7). For SVOCs, the acid surrogate 2,4,6-tribromophenol demonstrated a percent recovery of less than 10 percent for sample SA-1-2(10-12'). As a result, all associated compounds for sample SA-1-2(10-12') were qualified as reject (see Table 7). In addition, several other SVOC surrogates exceeded the required limits and all associated data were qualified as estimated (see Table 7). The remaining data showed acceptable surrogate recovery and no qualification was required.

### Internal Standard (IS) Summaries - Organics

To correct for changes in GC/MS response and sensitivity, IS compounds are added to investigative samples and QC samples prior to VOC and SVOC analyses. All results are calculated as a ratio of the IS response. The criteria by which the IS results are assessed are as follows:

- i) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard; and
- ii) the retention time of the IS must not vary more than  $\pm 30$  seconds from the associated calibration standard.

Most sample IS results met the above criteria and all were correctly used to calculate sample results with the exception of one sample for SVOCs. The sample results for compounds associated with the corresponding IS were qualified as estimated (see Table 8).

#### Laboratory Control Sample (LCS) Analysis

The LCS serves as a measure of overall analytical performance. LCSs are prepared with all analytes of interest and analyzed with each sample batch.

LCSs were prepared and analyzed for all parameters. The LCS recoveries were within the laboratory specified control limits for all analytes of interest except some VOC recoveries. Associated detected sample results were qualified as estimated (see Table 9).

#### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

MS/MSD samples are prepared for each parameter and analyzed with each sample batch for the organic parameters. MS/MSD samples are prepared and analyzed with the samples for each metal. The recoveries of spike analyses are used to assess the analytical accuracy achieved on individual sample matrices. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as shown in Table 1. The laboratory performed additional analyses internally. Most MS/MSD recoveries were within laboratory control limits demonstrating acceptable overall analytical accuracy and precision. The MS recovery was below the acceptable laboratory control limit on several SVOC compounds. Most data associated with the MS/MSD recovery exceedances were qualified as estimated (see Table 10). However, for three samples the recovery of 2,4-dinitrophenol was <10 percent in either one or both of the MS/MSD samples. As a result, the associated data were qualified as reject (see Table 10). No qualification was performed when only the MS or MSD was slightly outside of control limits.

#### Field Duplicate Sample Analyses

Analytical precision is also evaluated based on the analysis of duplicate samples. The samples selected for duplicate analyses are identified in Table 1. The laboratory performed additional analyses internally. Most duplicate analyses performed were acceptable, demonstrating good analytical precision. For VOC analyses, several field duplicates demonstrated non-compliant RPDs; however, the sample results were outside the estimated range of detection. Therefore, these sample results were not qualified. Any additional field duplicate samples with RPDs that were outside the acceptance criteria for VOCs, SVOCs, and metals were qualified as estimated (see Table 11).

#### Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Analysis

To verify that proper inter-element and background correction factors have been established by the laboratory, ICSs are analyzed. These samples contain high concentrations of aluminum, calcium, magnesium, and iron and are analyzed at the beginning and end of each sample analysis period.

ICS analysis results were evaluated for all samples. All ICS recoveries were within the established control limits of 80 to 120 percent.

### Serial Dilution - Inorganic Analyses

The serial dilution determines whether significant physical or chemical interferences exist due to sample matrix. A minimum of one per 20 investigative samples is analyzed at a five-fold dilution. For samples with sufficient analyte concentrations, the serial dilution results must agree within 10 percent of the original results.

Serial dilution analyses were performed and most results were acceptable. Sample results associated with outlying analyses were qualified as estimated (see Table 12).

### Target Compound Identification

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra (if applicable) were evaluated according to identification criteria established by the methods. The samples identified in Table 1 were reviewed. The organics reported adhered to the specified identification criteria.

### Trip Blanks - VOCs

Trip blanks are transported, stored, and analyzed with the investigative samples to identify potential cross-contamination of VOCs. Trip blanks were collected at the proper frequency, and most results were non-detect for the analytes of interest. Two trip blanks did have positive values for analytes of interest and were qualified as non-detect (U) at either the reporting limit or the analyte value (see Table 13).

### Calibration Range Exceedances

For all analytes (organic and inorganic), instrument--determined values must be within the calibrated range of analytes demonstrated during the initial calibration of the instrument. Most analytes were within this calibration range with the exceptions of two compounds analyzed for SVOCs. The associated sample results were qualified as estimated (see Table 14).

### System Performance

System performance between various QC checks was evaluated to monitor for changes that may have caused the degradation of data quality. The samples identified in Table 1 were reviewed. No technical problems or chromatographic anomalies were observed which require qualification of the data.

### Overall Assessment

Based on the assessment detailed in the foregoing, the data produced by Merit were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used as reported acceptable with the specific qualifications noted within.

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments
				TCL VOCs	TCL SVOCs	Cyanide	PCBs	Site TAL Metals(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, & Zn)	Ethylene Glycol	Coarse & Fractional Lead				
SA-1-1(1.1'-3.1')	SA-1-1	04/19/09	12:45	X	X	X	X	X	X	X	X	X		
SA-1-1(8-10')	SA-1-1	04/19/09	12:55	X	X	X	X	X	X	X	X	X		
SA-1-2(1-3')	SA-1-2	04/19/09	15:15	X	X	X	X	X	X	X	X	X		
SA-1-2(10-12')	SA-1-2	04/19/09	15:20	X	X	X	X	X	X	X	X	X		
SA-1-5(1-3')	SA-1-5	04/19/09	15:30	X	X	X	X	X	X	X	X	X		
SA-1-5(10-12')	SA-1-5	04/19/09	15:40	X	X	X	X	X	X	X	X	X		
SA-1-6(1-3')	SA-1-6	04/19/09	17:20	X	X	X	X	X	X	X	X	X		
SA-1-6(6-8')	SA-1-6	04/19/09	17:30	X	X	X	X	X	X	X	X	X		
SA-1-7(1-3')	SA-1-7	04/20/09	10:10	X	X	X	X	X	X	X	X	X		
SA-1-7(10-12')	SA-1-7	04/20/09	10:15	X	X	X	X	X	X	X	X	X		
SA-2-1(1-3')	SA-2-1	04/20/09	11:05	X	X	X	X	X	X	X	X	X		
SA-2-1(14-16')	SA-2-1	04/20/09	11:15	X	X	X	X	X	X	X	X	X		
SA-17-1(1-3')	SA-17-1	04/20/09	13:20	X	X	X	X	X	X	X	X	X		
SA-17-1(14-16')	SA-17-1	04/20/09	13:25	X	X	X	X	X	X	X	X	X		
SA-17-2(1-3')	SA-17-2	04/20/09	14:00	X	X	X	X	X	X	X	X	X		
SA-17-2(14-16')	SA-17-2	04/20/09	14:10	X	X	X	X	X	X	X	X	X		
SA-17-3(0.8-2.8')	SA-17-3	04/20/09	14:50	X	X	X	X	X	X	X	X	X		
SA-17-3(14-16')	SA-17-3	04/20/09	15:00	X	X	X	X	X	X	X	X	X		
SA-17-4(0.75-2.75')	SA-17-4	04/20/09	15:35	X	X	X	X	X	X	X	X	X		
Dup1(041905)	SA-2-1	04/20/09		X	X	X	X	X	X	X	X	X	Duplicate of sample SA-2-1(14-16')	
Dup2(042005)	SA-19-2	04/21/09	10:55	X	X	X	X	X	X	X	X	X	Duplicate of sample SA-19-2(14-16')	
SA-19-1(0.6-2.6')	SA-19-1	04/21/09	9:55	X	X	X	X	X	X	X	X	X		
SA-19-2(0.5-2.5')	SA-19-2	04/21/09	10:45	X	X	X	X	X	X	X	X	X	MS/MSD	
SA-19-2(14-16')	SA-19-2	04/21/09	10:55	X	X	X	X	X	X	X	X	X		
SA-7-4(0.7-2.7')	SA-7-4	04/21/09	12:00	X	X	X	X	X	X	X	X	X		
SA-13-3(0.6-2.6')	SA-13-3	04/21/09	13:45	X	X	X	X	X	X	X	X	X		
SA-13-3(14-16')	SA-13-3	04/21/09	14:00	X	X	X	X	X	X	X	X	X		
SA-7-1(0.6-2.6')	SA-7-1	04/21/09	15:15	X	X	X	X	X	X	X	X	X		
SA-7-1(14-16')	SA-7-1	04/21/09	15:30	X	X	X	X	X	X	X	X	X		
SA-9-2(0.5-2.5')	SA-9-2	04/21/09	15:50	X	X	X	X	X	X	X	X	X		
SA-9-2(14-16')	SA-9-2	04/21/09	16:00	X	X	X	X	X	X	X	X	X		

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Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments
				TCL VOCs	TCL SVOCs	Cyanide	PCBs	Site TAL Metals(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, & Zn)	Ethylene Glycol	Coarse & Fractional Lead				
Dup3(042005)	SA-9-2	04/21/09	15:50	X	X	X	X	X	X	X	X	X	Duplicate of sample SA-9-1(0.5-2.5')	
SA-8-4(0.7-2.7')	SA-8-4	04/22/09	9:15	X	X	X	X	X	X	X	X	X		
SA-8-4(14-16')	SA-8-4	04/22/09	9:20	X	X	X	X	X	X	X	X	X		
SA-8-3(0.75-2.75')	SA-8-3	04/22/09	9:40	X	X	X	X	X	X	X	X	X		
SA-8-3(14-16')	SA-8-3	04/22/09	9:50	X	X	X	X	X	X	X	X	X		
SA-9-1(0.8-2.8')	SA-9-1	04/22/09	10:55	X	X	X	X	X	X	X	X	X		
SA-9-1(14-16')	SA-9-1	04/22/09	10:05	X	X	X	X	X	X	X	X	X		
SA-9-3(0.6-2.6')	SA-9-3	04/22/09	12:10	X	X	X	X	X	X	X	X	X		
SA-9-3(14-16')	SA-9-3	04/22/09	12:20	X	X	X	X	X	X	X	X	X		
SA-3-1(0.75-2.75')	SA-3-1	04/22/09	13:50	X	X	X	X	X	X	X	X	X		
SA-3-1(14-16')	SA-3-1	04/22/09	14:00	X	X	X	X	X	X	X	X	X	MS/MSD	
SA-9-4(0.75-2.75')	SA-9-4	04/22/09	15:00	X	X	X	X	X	X	X	X	X		
SA-9-4(14-16')	SA-9-4	04/22/09	15:10	X	X	X	X	X	X	X	X	X		
Dup4(042105)	SA-3-1	04/22/09	13:50	X	X	X	X	X	X	X	X	X	Duplicate of sample SA-3-1(0.75-2.75')	
SA-10-1(0.8-2.8')	SA-10-1	04/22/09	15:50	X	X	X	X	X	X	X	X	X		
SA-10-1(14-16')	SA-10-1	04/22/09	16:00	X	X	X	X	X	X	X	X	X		
SA-10-2(0.7-2.7')	SA-10-2	04/22/09	16:15	X	X	X	X	X	X	X	X	X		
SA-10-2(14-16')	SA-10-2	04/22/09	16:30	X	X	X	X	X	X	X	X	X		
SA-9-5(0.75-2.75')	SA-9-5	04/23/09	8:40	X	X	X	X	X	X	X	X	X		
Dup5(042205)	SA-9-5	04/23/09	8:40	X	X	X	X	X	X	X	X	X	Duplicate of sample SA-9-5(0.75-2.75')	
SA-11-1(0.75-2.75')	SA-11-1	04/23/09	9:00	X	X	X	X	X	X	X	X	X		
SA-9-6(0.6-2.6')	SA-9-6	04/23/09	9:30	X	X	X	X	X	X	X	X	X		
SA-9-6(10-12')	SA-9-6	04/23/09	10:00	X	X	X	X	X	X	X	X	X		
SA-9-7(0.6-2.6')	SA-9-7	04/23/09	10:35	X	X	X	X	X	X	X	X	X		
SA-9-7(8-10')	SA-9-7	04/23/09	10:45	X	X	X	X	X	X	X	X	X		
TB-(042205)	Trip Blank	04/23/09		X										
SA-12-1(0.5-2.5')	SA-12-1	04/23/09	11:36	X	X	X	X	X	X	X	X	X		
SA-12-1(8-10')	SA-12-1	04/23/09	11:45	X	X	X	X	X	X	X	X	X		
SA-12-2(0.7-2.7')	SA-12-2	04/26/09	8:45	X	X	X	X	X	X	X	X	X		
SA-12-2(11.5-13.5')	SA-12-2	04/26/09	9:00	X	X	X	X	X	X	X	X	X		
SA-7-3(0.8-2.8')	SA-7-3	04/26/09	9:20	X	X	X	X	X	X	X	X	X	MS/MSD	

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Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments
				TCL VOCs	TCL SVOCs	Cyanide	PCBs	Site TAL Metals(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, & Zn)	Ethylene Glycol	Coarse & Fractional Lead				
SA-7-3(8-10')	SA-7-3	04/26/09	9:30	X	X	X	X	X	X	X	X			
SA-7-5(0.7-2.7')	SA-7-5	04/26/09	10:15	X	✕	✕	✕	✕	✕	✕	✕	broken-therefore, crossed out x's were not analyzed		
SA-7-5(14-16')	SA-7-5	04/26/09	10:30	X	X	X	X	X	X	X	X			
SA-15-1(0.7-2.7')	SA-15-1	04/26/09	11:15	X	X	X	X	X	X	X	X			
SA-15-1(10-12')	SA-15-1	04/26/09	11:30	X	X	X	X	X	X	X	X			
SA-13-1(0.75-2.75')	SA-13-1	04/26/09	13:15	X	X	X	X	X	X	X	X			
SA-13-1(14-16')	SA-13-1	04/26/09	13:30	X	✕	✕	✕	✕	✕	✕	✕	broken-therefore, crossed out x's were not analyzed		
Dup6(042505)	SA-12-2	04/26/09	9:00	X	X	X	X	X	X	X	X	Duplicate of sample SA-12-2(0.7-2.7')		
SA-7-6(0.75-2.75')	SA-7-6	04/26/09	14:45	X	X	X	X	X	X	X	X			
SA-7-6(12-14')	SA-7-6	04/26/09	18:25	X	X	X	X	X	X	X	X			
TB(042605)	Trip Blank	04/27/09		X										
SA-13-2(0.75-2.75')	SA-13-2	04/27/09	8:55	X	X	X	X	X	X	X	X			
SA-13-2(14-16')	SA-13-2	04/27/09	9:05	X	X	X	X	X	X	X	X			
SA-8-2(0.75-2.75')	SA-8-2	04/27/09	9:40	X	X	X	X	X	X	X	X			
SA-8-2(14-16')	SA-8-2	04/27/09	10:00	X	X	X	X	X	X	X	X			
Dup7(042605)	SA-8-2	04/27/09	10:00	X	X	X	X	X	X	X	X	Duplicate of sample SA-8-2(14-16')		
SA-8-1(0.7-2.7')	SA-8-1	04/27/09	11:10	X	X	X	X	X	X	X	X			
SA-8-1(14-16')	SA-8-1	04/27/09	11:20	X	X	X	X	X	X	X	X			
SA-6-2(0.7-2.7')	SA-6-2	04/27/09	12:05	X	X	X	X	X	X	X	X			
SA-6-1(0.5-2.5')	SA-6-1	04/27/09	13:30	X	X	X	X	X	X	X	X			
SA-6-1(14-16')	SA-6-1	04/27/09	13:45	X	X	X	X	X	X	X	X			
SA-6-3(0.75-2.75')	SA-6-3	04/27/09	14:55	X	X	X	X	X	X	X	X			
SA-6-3(14-16')	SA-6-3	04/27/09	15:15	X	X	X	X	X	X	X	X			
Dup8(042605)	SA-6-1	04/27/09	13:45	X	X	X	X	X	X	X	X	Duplicate of sample SA-6-1(14-16')		
SA-7-2(0.5-2.5')	SA-7-2	04/27/09	16:00	X	X	X	X	X	X	X	X			
SA-7-2(14-16')	SA-7-2	04/27/09	16:10	X	X	X	X	X	X	X	X			
SA-14-1(0.5-2.5')	SA-14-1	04/28/09	8:30	X	X	X	X	X	X	X	X	MS/MSD		
SA-14-1(12-14')	SA-14-1	04/28/09	9:00	X	X	X	X	X	X	X	X			
TB(042705)	Trip Blank	04/28/09		X										
Dup9(042705)	SA-18-1	04/28/09	10:00	X	X	X	X	X	X	X	X	Duplicate of sample SA-18-1(0.4-2.4')		
SA-18-1(0.4-2.4')	SA-18-1	04/28/09	10:00	X	X	X	X	X	X	X	X			

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters							Comments
				TCL VOCs	TCL SVOCs	Cyanide	PCBs	Site TAL Metals(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, & Zn)	Ethylene Glycol	Coarse & Fractional Lead	
SA-18-1(14-16')	SA-18-1	04/28/09	10:15	X	X	X	X	X	X	X	
SA-18-2(0.7-2.7')	SA-18-2	04/28/09	11:00	X	X	X	X	X	X	X	
SA-18-2(14-16')	SA-18-2	04/28/09	11:15	X	X	X	X	X	X	X	
SA-3-2(0.6-2.6')	SA-3-2	04/28/09	11:50	X	X	X	X	X	X	X	
SA-3-2(14-16')	SA-3-2	04/28/09	12:30	X	X	X	X	X	X	X	
SA-14-2(0.5-2.5')	SA-14-2	04/28/09	14:00	X	X	X	X	X	X	X	
SA-14-3(0.5-2.5')	SA-14-3	04/28/09	14:15	X	X	X	X	X	X	X	
SA-14-3(14-16')	SA-14-3	04/28/09	14:30	X	X	X	X	X	X	X	
SA-14-4(0.7-2.7')	SA-14-4	04/28/09	15:15	X	X	X	X	X	X	X	
SA-14-4(6-8')	SA-14-4	04/28/09	15:30	X	X	X	X	X	X	X	
SA-14-5(0.5-2.5')	SA-14-5	04/28/09	16:20	X	X	X	X	X	X	X	
SA-14-5(12-14')	SA-14-5	04/28/09	16:40	X	X	X	X	X	X	X	
SA-5-2(0.7-2.7')	SA-5-2	04/29/09	8:10	X	X	X	X	X	X	X	
SA-5-2(14-16')	SA-5-2	04/29/09	8:20	X	X	X	X	X	X	X	MS/MSD
SA-5-3(0.7-2.7')	SA-5-3	04/29/09	9:10	X	X	X	X	X	X	X	
SA-5-1(0.75-2.75')	SA-5-1	04/29/09	10:10	X	X	X	X	X	X	X	
SA-4-1(0.75-2.75')	SA-4-1	04/29/09	10:45	X	X	X	X	X	X	X	
SA-4-1(14-16')	SA-4-1	04/29/09	11:00	X	X	X	X	X	X	X	
SA-4-2(0.9-2.9')	SA-4-2	04/29/09	11:35	X	X	X	X	X	X	X	
SA-4-2(14-16')	SA-4-2	04/29/09	11:45	X	X	X	X	X	X	X	MS/MSD
SA-4-3(0.7-2.7')	SA-4-3	04/29/09	12:15	X	X	X	X	X	X	X	
SA-4-3(14-16')	SA-4-3	04/29/09	12:30	X	X	X	X	X	X	X	
TB-(042805)	Trip Blank	04/29/09		X							
Dup10(042805)	SA-5-2	04/29/09	8:10	X	X	X	X	X	X	X	Duplicate of sample SA-5-2(0.7-2.7')
Dup11(042805)	SA-5-3	04/29/09	9:10	X	X	X	X	X	X	X	Duplicate of sample SA-5-3(0.7-2.7')
Dup12(042805)	SA-4-1	04/29/09	11:00	X	X	X	X	X	X	X	Duplicate of sample SA-4-1(14-16')
SA-13-1(14-16')	SA-13-1	04/29/09	13:30		X	X	X	X	X	X	Sample Recollected Due to Broken Bottle
SA-7-5(0.7-2.7')	SA-7-5	04/29/09	14:30		X	X	X	X	X	X	Sample Recollected Due to Broken Bottle

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
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**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters								Comments
				TCL VOCs	TCL SVOCs	Cyanide	PCBs	Site TAL Metals(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, & Zn)	Ethylene Glycol	Coarse & Fractional Lead		
SA-1-1(8-10')	SA-1-1	04/29/09	15:20	X								Sample Recollected Due to Broken Bottle
SA-17-1(1-3')	SA-17-1	04/29/09	15:40	X								Sample Recollected Due to Broken Bottle

Notes:

Ag Silver.  
 Al Aluminum.  
 As Arsenic.  
 Ba Barium.  
 Be Beryllium.  
 Ca Calcium.  
 Cd Cadmium.  
 Co Cobalt.  
 Cr Chromium.  
 Cu Copper.  
 Fe Iron.  
 Hg Mercury.  
 K Potassium.  
 Mg Magnesium.  
 Mn Manganese.

Notes: (Cont'd.)

MS Matrix Spike.  
 MSD Matrix Spike Duplicate.  
 Na Sodium.  
 Ni Nickel.  
 Pb Lead.  
 PCBS Polychlorinated Biphenyls.  
 Sb Antimony.  
 Se Selenium.  
 SVOCs Semi-Volatile Organic Compounds.  
 TAL Target Analyte List.  
 TCL Target Compound List.  
 Tl Thallium.  
 V Vanadium.  
 VOCS Volatile Organic Compounds.

**TABLE 2**  
**SUMMARY OF ANALYTICAL METHODOLOGIES**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
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<i>Parameter</i>	<i>Method</i>
TCL Volatile Organic Compounds (VOCs)	SW-846 8260 <sup>1</sup>
TCL Semi-Volatile Organic Compounds (SVOCs)	SW-846 8270 <sup>1</sup>
TAL Metals (GM Lansing 23 metals)	SW-846 6020/7471 <sup>1</sup>
Cyanide	SW-846 9010B <sup>1</sup>
Ethylene Glycol	SW-846 8015 <sup>1</sup>
PolyChlorinated Biphenyls (PCBs)	SW-846 8082 <sup>1</sup>
Coarse & Fractional Lead	SW-846 6020 <sup>1</sup>

Notes:

- <sup>1</sup> "Test Methods for Solid Waste Physical/Chemical Methods", SW-846, 3rd Edition, September 1986 (with subsequent revisions).
- <sup>2</sup> Multi-Media, Multi-Concentration, Inorganic Analysis, (ILM05.3), March 2004. Referenced from "Methods for the Chemical Analysis of Water and Wastes", (MCAWW), EPA-600/4-79-020, March 1983 and subsequent revisions.
- TAL Target Analyte List.
- TCL Target Compound List.

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOCs	Bromomethane (Methyl Bromide)	FL050422.M	0.024		SA-10-1(0.8-2.8)	300 U	µg/kg	R
					SA-10-1(14-16)	300 U	µg/kg	R
					SA-10-2(0.7-2.7)	300 U	µg/kg	R
					SA-10-2(14-16)	300 U	µg/kg	R
					SA-1-1(1.1-3.1)	300 U	µg/kg	R
					SA-1-2(10-12)	300 U	µg/kg	R
					SA-1-2(1-3)	300 U	µg/kg	R
					SA-13-3(0.6-2.6)	300 U	µg/kg	R
					SA-13-3(14-16)	1000 U	µg/kg	R
					SA-1-5(10-12)	300 U	µg/kg	R
					SA-1-5(1-3)	300 U	µg/kg	R
					SA-1-6(1-3)	300 U	µg/kg	R
					SA-1-6(6-8)	300 U	µg/kg	R
					SA-1-7(10-12)	5000 U	µg/kg	R
					SA-1-7(1-3)	300 U	µg/kg	R
					SA-17-1(14-16)	300 U	µg/kg	R
					SA-17-2(1-3)	300 U	µg/kg	R
					SA-17-2(14-16)	500 U	µg/kg	R
					SA-17-3(0.8-2.8)	300 U	µg/kg	R
					SA-17-3(14-16)	300 U	µg/kg	R
					SA-17-4(0.75-2.75)	300 U	µg/kg	R
					SA-19-1(0.6-2.6)	300 U	µg/kg	R
					SA-19-2(0.5-2.5)	300 U	µg/kg	R
					SA-19-2(14-16)	300 U	µg/kg	R
					SA-2-1(1-3)	300 U	µg/kg	R
					SA-2-1(14-16)	300 U	µg/kg	R
					SA-3-1(0.75-2.75)	300 U	µg/kg	R
					SA-3-1(14-16)	300 U	µg/kg	R
SA-7-1(0.6-2.6)	300 U	µg/kg	R					
SA-7-1(14-16)	300 U	µg/kg	R					
SA-7-4(0.7-2.7)	300 U	µg/kg	R					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOCs	Bromomethane (Methyl Bromide)	FL050422.M	0.024		SA-8-3(0.75-2.75)	300 U	µg/kg	R
					SA-8-3(14-16)	300 U	µg/kg	R
					SA-8-4(0.7-2.7)	300 U	µg/kg	R
					SA-8-4(14-16)	300 U	µg/kg	R
					SA-9-1(0.8-2.8)	300 U	µg/kg	R
					SA-9-1(14-16)	300 U	µg/kg	R
					SA-9-2(0.5-2.5)	300 U	µg/kg	R
					SA-9-2(14-16)	300 U	µg/kg	R
					SA-9-3(0.6-2.6)	300 U	µg/kg	R
					SA-9-3(14-16)	300 U	µg/kg	R
					SA-9-4(0.75-2.75)	300 U	µg/kg	R
					SA-9-4(14-16)	300 U	µg/kg	R
					Dup1(041905)	300 U	µg/kg	R
					Dup2(042005)	300 U	µg/kg	R
					Dup3(042005)	300 U	µg/kg	R
					Dup4(042105)	300 U	µg/kg	R
VOCs	1,2-Dibromo-3-chloropropane (DBCP)	FL050422.M		34.6	SA-10-1(0.8-2.8)	60 U	µg/kg	UJ
					SA-10-1(14-16)	50 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	50 U	µg/kg	UJ
					SA-10-2(14-16)	50 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	50 U	µg/kg	UJ
					SA-1-2(10-12)	50 U	µg/kg	UJ
					SA-1-2(1-3)	50 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	50 U	µg/kg	UJ
					SA-13-3(14-16)	300 U	µg/kg	UJ
					SA-1-5(10-12)	50 U	µg/kg	UJ
					SA-1-5(1-3)	50 U	µg/kg	UJ
					SA-1-6(1-3)	50 U	µg/kg	UJ
					SA-1-6(6-8)	60 U	µg/kg	UJ
					SA-1-7(10-12)	1000 U	µg/kg	UJ

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOCs	1,2-Dibromo-3-chloropropane (DBCP)	FL050422.M		34.6	SA-1-7(1-3)	50 U	µg/kg	UJ
					SA-17-1(14-16)	60 U	µg/kg	UJ
					SA-17-2(1-3)	60 U	µg/kg	UJ
					SA-17-2(14-16)	100 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	50 U	µg/kg	UJ
					SA-17-3(14-16)	50 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	50 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	50 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	50 U	µg/kg	UJ
					SA-19-2(14-16)	50 U	µg/kg	UJ
					SA-2-1(1-3)	60 U	µg/kg	UJ
					SA-2-1(14-16)	50 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	60 U	µg/kg	UJ
					SA-3-1(14-16)	60 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	50 U	µg/kg	UJ
					SA-7-1(14-16)	50 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	50 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	60 U	µg/kg	UJ
					SA-8-3(14-16)	50 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	60 U	µg/kg	UJ
					SA-8-4(14-16)	50 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	50 U	µg/kg	UJ
					SA-9-1(14-16)	50 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	50 U	µg/kg	UJ
					SA-9-2(14-16)	50 U	µg/kg	UJ
					SA-9-3(0.6-2.6)	50 U	µg/kg	UJ
					SA-9-3(14-16)	50 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	50 U	µg/kg	UJ
					SA-9-4(14-16)	50 U	µg/kg	UJ
					Dup1(041905)	60 U	µg/kg	UJ
Dup2(042005)	50 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOCs	1,2-Dibromo-3-chloropropane (DBCP)	FL050422.M		34.6	Dup3(042005)	50 U	µg/kg	UJ
					Dup4(042105)	50 U	µg/kg	UJ
SVOC	4-Chloroaniline	bb050428.m		72.5	Dup1(041905)	700 U	µg/kg	UJ
					Dup10(042805)	900 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	700 U	µg/kg	UJ
					Dup12(042805)	700 U	µg/kg	UJ
					Dup2(042005)	700 U	µg/kg	UJ
					Dup3(042005)	700 U	µg/kg	UJ
					Dup4(042105)	700 U	µg/kg	UJ
					Dup5(042205)	700 U	µg/kg	UJ
					Dup6(042505)	700 U	µg/kg	UJ
					Dup7(042605)	700 U	µg/kg	UJ
					Dup8(042605)	700 U	µg/kg	UJ
					Dup9(042705)	700 U	µg/kg	UJ
					SA-10-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-10-1(14-16)	700 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-10-2(14-16)	700 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	700 U	µg/kg	UJ
					SA-1-1(8-10)	700 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	700 U	µg/kg	UJ
SA-1-2(10-12)	700 U	µg/kg	UJ					
SA-1-2(10-12)	700 U	µg/kg	UJ					
SA-1-2(1-3)	700 U	µg/kg	UJ					
SA-1-2(1-3)	700 U	µg/kg	UJ					
SA-12-1(0.5-2.5)	700 U	µg/kg	UJ					
SA-12-1(8-10)	700 U	µg/kg	UJ					
SA-12-2(0.7-2.7)	700 U	µg/kg	UJ					
SA-12-2(11.5-13.5)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	4-Chloroaniline	bb050428.m		72.5	SA-13-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-13-1(14-16)	700 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-13-2(14-16)	700 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-13-3(14-16)	700 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-1(12-14)	700 U	µg/kg	UJ
					SA-14-1(12-14)	700 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(14-16)	700 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-14-4(6-8)	700 U	µg/kg	UJ
					SA-14-5(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-5(12-14)	700 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	700 U	µg/kg	UJ
					SA-1-5(1-3)	700 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-1-6(1-3)	700 U	µg/kg	UJ
					SA-1-6(6-8)	700 U	µg/kg	UJ
					SA-1-7(10-12)	700 U	µg/kg	UJ
					SA-1-7(1-3)	700 U	µg/kg	UJ
SA-17-1(1-3)	700 U	µg/kg	UJ					
SA-17-1(14-16)	700 U	µg/kg	UJ					
SA-17-2(1-3)	700 U	µg/kg	UJ					
SA-17-2(14-16)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	4-Chloroaniline	bb050428.m		72.5	SA-17-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-17-3(14-16)	700 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	700 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	700 U	µg/kg	UJ
					SA-18-1(14-16)	700 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-18-2(14-16)	700 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-19-2(14-16)	700 U	µg/kg	UJ
					SA-2-1(1-3)	700 U	µg/kg	UJ
					SA-2-1(14-16)	700 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-3-1(14-16)	700 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	700 U	µg/kg	UJ
					SA-3-2(14-16)	700 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-4-1(14-16)	700 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	700 U	µg/kg	UJ
					SA-4-2(14-16)	700 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-4-3(14-16)	700 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-5-2(14-16)	700 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-6-1(0.5-2.5)	700 U	µg/kg	UJ
					SA-6-1(14-16)	700 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	700 U	µg/kg	UJ
SA-6-3(14-16)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	4-Chloroaniline	bb050428.m		72.5	SA-7-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-7-1(14-16)	700 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-7-2(14-16)	700 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	700 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	700 U	µg/kg	UJ
					SA-7-5(14-16)	700 U	µg/kg	UJ
					SA-7-5(14-16)	700 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	700 U	µg/kg	UJ
					SA-7-6(12-14)	700 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-1(14-16)	700 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-2(14-16)	700 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-3(14-16)	700 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-4(14-16)	700 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-9-1(14-16)	700 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-9-2(14-16)	700 U	µg/kg	UJ
					SA-9-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-3(14-16)	700 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	700 U	µg/kg	UJ
					SA-9-4(14-16)	700 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	700 U	µg/kg	UJ
SA-9-6(0.6-2.6)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	4-Chloroaniline	bb050428.m		72.5	SA-9-6(10-12)	700 U	µg/kg	UJ
					SA-9-7(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-7(8-10)	700 U	µg/kg	UJ
SVOC	Hexachlorocyclopentadiene	bb050428.m		31.7	Dup1(041905)	300 U	µg/kg	UJ
					Dup10(042805)	500 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	300 U	µg/kg	UJ
					Dup12(042805)	300 U	µg/kg	UJ
					Dup2(042005)	300 U	µg/kg	UJ
					Dup3(042005)	300 U	µg/kg	UJ
					Dup4(042105)	300 U	µg/kg	UJ
					Dup5(042205)	300 U	µg/kg	UJ
					Dup6(042505)	300 U	µg/kg	UJ
					Dup7(042605)	300 U	µg/kg	UJ
					Dup8(042605)	300 U	µg/kg	UJ
					Dup9(042705)	300 U	µg/kg	UJ
					SA-10-1(0.8-2.8)	300 U	µg/kg	UJ
					SA-10-1(14-16)	300 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-10-2(14-16)	300 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	300 U	µg/kg	UJ
					SA-1-1(8-10)	300 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(1-3)	300 U	µg/kg	UJ
SA-1-2(1-3)	300 U	µg/kg	UJ					
SA-12-1(0.5-2.5)	300 U	µg/kg	UJ					
SA-12-1(8-10)	300 U	µg/kg	UJ					
SA-12-2(0.7-2.7)	300 U	µg/kg	UJ					
SVOC	Hexachlorocyclopentadiene	bb050428.m		31.7	SA-12-2(11.5-13.5)	300 U	µg/kg	UJ

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
					SA-13-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-1(14-16)	300 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-2(14-16)	300 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	300 U	µg/kg	UJ
					SA-13-3(14-16)	300 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-1(12-14)	300 U	µg/kg	UJ
					SA-14-1(12-14)	300 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(14-16)	300 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-14-4(6-8)	300 U	µg/kg	UJ
					SA-14-5(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-5(12-14)	300 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	300 U	µg/kg	UJ
					SA-1-5(1-3)	300 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	300 U	µg/kg	UJ
					SA-1-6(1-3)	300 U	µg/kg	UJ
					SA-1-6(6-8)	300 U	µg/kg	UJ
					SA-1-7(10-12)	300 U	µg/kg	UJ
					SA-1-7(1-3)	300 U	µg/kg	UJ
					SA-17-1(1-3)	300 U	µg/kg	UJ
					SA-17-1(14-16)	300 U	µg/kg	UJ
					SA-17-2(1-3)	300 U	µg/kg	UJ
SVOC	Hexachlorocyclopentadiene	bb050428.m		31.7	SA-17-2(14-16)	300 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	300 U	µg/kg	UJ

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
					SA-17-3(14-16)	300 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	300 U	µg/kg	UJ
					SA-18-1(14-16)	300 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-18-2(14-16)	300 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	300 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-19-2(14-16)	300 U	µg/kg	UJ
					SA-2-1(1-3)	300 U	µg/kg	UJ
					SA-2-1(14-16)	300 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-3-1(14-16)	300 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	300 U	µg/kg	UJ
					SA-3-2(14-16)	300 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-4-1(14-16)	300 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	300 U	µg/kg	UJ
					SA-4-2(14-16)	300 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	300 U	µg/kg	UJ
					SA-4-3(14-16)	300 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-5-2(14-16)	300 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	300 U	µg/kg	UJ
					SA-6-1(0.5-2.5)	300 U	µg/kg	UJ
					SA-6-1(14-16)	300 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	300 U	µg/kg	UJ
SVOC	Hexachlorocyclopentadiene	bb050428.m		31.7	SA-6-3(14-16)	300 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	300 U	µg/kg	UJ
					SA-7-1(14-16)	300 U	µg/kg	UJ

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
					SA-7-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-7-2(14-16)	300 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	300 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	300 U	µg/kg	UJ
					SA-7-6(12-14)	300 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-1(14-16)	300 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-2(14-16)	300 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-3(14-16)	300 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-4(14-16)	300 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	300 U	µg/kg	UJ
					SA-9-1(14-16)	300 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-9-2(14-16)	300 U	µg/kg	UJ
					SA-9-3(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-3(14-16)	300 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-4(14-16)	300 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	300 U	µg/kg	UJ
SVOC	Hexachlorocyclopentadiene	bb050428.m		31.7	SA-9-6(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-6(10-12)	300 U	µg/kg	UJ
					SA-9-7(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-7(8-10)	300 U	µg/kg	UJ

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2,4-Dinitrophenol	bb050428.m		30.9	Dup1(041905)	700 U	µg/kg	UJ
					Dup10(042805)	900 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	700 U	µg/kg	UJ
					Dup12(042805)	700 U	µg/kg	UJ
					Dup2(042005)	700 U	µg/kg	UJ
					Dup3(042005)	700 U	µg/kg	UJ
					Dup4(042105)	700 U	µg/kg	UJ
					Dup5(042205)	700 U	µg/kg	UJ
					Dup6(042505)	700 U	µg/kg	UJ
					Dup7(042605)	700 U	µg/kg	UJ
					Dup8(042605)	700 U	µg/kg	UJ
					Dup9(042705)	700 U	µg/kg	UJ
					SA-10-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-10-1(14-16)	700 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-10-2(14-16)	700 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	700 U	µg/kg	UJ
					SA-1-1(8-10)	700 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-1-2(10-12)	700 U	µg/kg	UJ
SA-1-2(10-12)	700 U	µg/kg	UJ					
SA-1-2(1-3)	700 U	µg/kg	UJ					
SA-1-2(1-3)	700 U	µg/kg	UJ					
SA-12-1(0.5-2.5)	700 U	µg/kg	UJ					
SA-12-1(8-10)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2,4-Dinitrophenol	bb050428.m		30.9	SA-12-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	700 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-13-1(14-16)	700 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-13-2(14-16)	700 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-13-3(14-16)	700 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	700 U	µg/kg	R
					SA-14-1(12-14)	700 U	µg/kg	UJ
					SA-14-1(12-14)	700 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(14-16)	700 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-14-4(6-8)	700 U	µg/kg	UJ
					SA-14-5(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-5(12-14)	700 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	700 U	µg/kg	UJ
					SA-1-5(1-3)	700 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-1-6(1-3)	700 U	µg/kg	UJ
					SA-1-6(6-8)	700 U	µg/kg	UJ
					SA-1-7(10-12)	700 U	µg/kg	UJ
SA-1-7(1-3)	700 U	µg/kg	UJ					
SA-17-1(1-3)	700 U	µg/kg	UJ					
SA-17-1(14-16)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2,4-Dinitrophenol	bb050428.m		30.9	SA-17-2(1-3)	700 U	µg/kg	UJ
					SA-17-2(14-16)	700 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-17-3(14-16)	700 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	700 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	700 U	µg/kg	UJ
					SA-18-1(14-16)	700 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-18-2(14-16)	700 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-19-2(14-16)	700 U	µg/kg	UJ
					SA-2-1(1-3)	700 U	µg/kg	UJ
					SA-2-1(14-16)	700 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-3-1(14-16)	700 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	700 U	µg/kg	UJ
					SA-3-2(14-16)	700 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-4-1(14-16)	700 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	700 U	µg/kg	UJ
					SA-4-2(14-16)	700 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-4-3(14-16)	700 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-5-2(14-16)	700 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-6-1(0.5-2.5)	700 U	µg/kg	UJ
					SA-6-1(14-16)	700 U	µg/kg	UJ
SA-6-2(0.7-2.7)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2,4-Dinitrophenol	bb050428.m		30.9	SA-6-3(0.75-2.75)	700 U	µg/kg	UJ
					SA-6-3(14-16)	700 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-7-1(14-16)	700 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-7-2(14-16)	700 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	700 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	700 U	µg/kg	UJ
					SA-7-5(14-16)	700 U	µg/kg	UJ
					SA-7-5(14-16)	700 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	700 U	µg/kg	UJ
					SA-7-6(12-14)	700 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-1(14-16)	700 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-2(14-16)	700 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-3(14-16)	700 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-4(14-16)	700 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-9-1(14-16)	700 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-9-2(14-16)	700 U	µg/kg	UJ
					SA-9-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-3(14-16)	700 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	700 U	µg/kg	UJ
SA-9-4(14-16)	700 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2,4-Dinitrophenol	bb050428.m		30.9	SA-9-5(0.75-2.75)	700 U	µg/kg	UJ
					SA-9-6(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-6(10-12)	700 U	µg/kg	UJ
					SA-9-7(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-7(8-10)	700 U	µg/kg	UJ
SVOC	Indeno(1,2,3-cd)pyrene	bb050428.m		45.6	Dup1(041905)	300 U	µg/kg	UJ
					Dup10(042805)	500 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	300 U	µg/kg	UJ
					Dup12(042805)	300 U	µg/kg	UJ
					Dup2(042005)	300 U	µg/kg	UJ
					Dup3(042005)	300 U	µg/kg	UJ
					Dup4(042105)	300 U	µg/kg	UJ
					Dup5(042205)	300 U	µg/kg	UJ
					Dup6(042505)	300 U	µg/kg	UJ
					Dup7(042605)	300 U	µg/kg	UJ
					Dup8(042605)	300 U	µg/kg	UJ
					Dup9(042705)	500	µg/kg	J
					SA-10-1(0.8-2.8)	70 J	µg/kg	J
					SA-10-1(14-16)	300 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-10-2(14-16)	300 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	300 U	µg/kg	UJ
					SA-1-1(8-10)	300 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(1-3)	300 U	µg/kg	UJ
SA-1-2(1-3)	300 U	µg/kg	UJ					
SA-12-1(0.5-2.5)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Indeno(1,2,3-cd)pyrene	bb050428.m		45.6	SA-12-1(8-10)	2600	µg/kg	J
					SA-12-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	300 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	200 J	µg/kg	J
					SA-13-1(14-16)	300 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-2(14-16)	300 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	300 U	µg/kg	UJ
					SA-13-3(14-16)	300 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	2900	µg/kg	J
					SA-14-1(12-14)	400	µg/kg	J
					SA-14-1(12-14)	300 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(14-16)	300 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-14-4(6-8)	70 J	µg/kg	J
					SA-14-5(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-5(12-14)	300 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	300 U	µg/kg	UJ
					SA-1-5(1-3)	300 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	300 U	µg/kg	UJ
					SA-1-6(1-3)	300 U	µg/kg	UJ
SA-1-6(6-8)	300 U	µg/kg	UJ					
SA-1-7(10-12)	300 U	µg/kg	UJ					
SA-1-7(1-3)	300 U	µg/kg	UJ					
SA-17-1(1-3)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Indeno(1,2,3-cd)pyrene	bb050428.m		45.6	SA-17-1(14-16)	300 U	µg/kg	UJ
					SA-17-2(1-3)	300 U	µg/kg	UJ
					SA-17-2(14-16)	300 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-17-3(14-16)	300 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	400	µg/kg	J
					SA-18-1(14-16)	300 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	900	µg/kg	J
					SA-18-2(14-16)	300 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	300 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-19-2(14-16)	300 U	µg/kg	UJ
					SA-2-1(1-3)	300 U	µg/kg	UJ
					SA-2-1(14-16)	300 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-3-1(14-16)	300 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	200 J	µg/kg	J
					SA-3-2(14-16)	300 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-4-1(14-16)	300 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	300 U	µg/kg	UJ
					SA-4-2(14-16)	300 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	300 U	µg/kg	UJ
					SA-4-3(14-16)	300 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-5-2(14-16)	300 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	100 J	µg/kg	J
					SA-6-1(0.5-2.5)	70 J	µg/kg	J
SA-6-1(14-16)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Indeno(1,2,3-cd)pyrene	bb050428.m		45.6	SA-6-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	100 J	µg/kg	J
					SA-6-3(14-16)	300 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	300 J	µg/kg	J
					SA-7-1(14-16)	300 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	2100	µg/kg	J
					SA-7-2(14-16)	300 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	300 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	300 U	µg/kg	UJ
					SA-7-6(12-14)	300 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-1(14-16)	300 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-2(14-16)	300 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-3(14-16)	300 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-4(14-16)	300 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	300 U	µg/kg	UJ
					SA-9-1(14-16)	300 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-9-2(14-16)	300 U	µg/kg	UJ
SA-9-3(0.6-2.6)	300 U	µg/kg	UJ					
SA-9-3(14-16)	300 U	µg/kg	UJ					
SA-9-4(0.75-2.75)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Indeno(1,2,3-cd)pyrene	bb050428.m		45.6	SA-9-4(14-16)	300 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-6(0.6-2.6)	200 J	µg/kg	J
					SA-9-6(10-12)	300 J	µg/kg	J
					SA-9-7(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-7(8-10)	3700 J	µg/kg	J
SVOC	Dibenzo(a,h)anthracene	bb050428.m		46.9	Dup1(041905)	300 U	µg/kg	UJ
					Dup10(042805)	500 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	300 U	µg/kg	UJ
					Dup12(042805)	300 U	µg/kg	UJ
					Dup2(042005)	300 U	µg/kg	UJ
					Dup3(042005)	300 U	µg/kg	UJ
					Dup4(042105)	300 U	µg/kg	UJ
					Dup5(042205)	300 U	µg/kg	UJ
					Dup6(042505)	300 U	µg/kg	UJ
					Dup7(042605)	300 U	µg/kg	UJ
					Dup8(042605)	300 U	µg/kg	UJ
					Dup9(042705)	400	µg/kg	J
					SA-10-1(0.8-2.8)	300 U	µg/kg	UJ
					SA-10-1(14-16)	300 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-10-2(14-16)	300 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	300 U	µg/kg	UJ
					SA-1-1(8-10)	300 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(10-12)	300 U	µg/kg	UJ
					SA-1-2(1-3)	300 U	µg/kg	UJ
SA-1-2(1-3)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Dibenzo(a,h)anthracene	bb050428.m		46.9	SA-12-1(0.5-2.5)	300 U	µg/kg	UJ
					SA-12-1(8-10)	1000	µg/kg	J
					SA-12-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	300 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-1(14-16)	300 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-2(14-16)	300 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	300 U	µg/kg	UJ
					SA-13-3(14-16)	300 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	1400	µg/kg	J
					SA-14-1(12-14)	300	µg/kg	J
					SA-14-1(12-14)	300 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(14-16)	300 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-14-4(6-8)	300 U	µg/kg	UJ
					SA-14-5(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-5(12-14)	300 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	300 U	µg/kg	UJ
					SA-1-5(1-3)	300 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	300 U	µg/kg	UJ
SA-1-6(1-3)	300 U	µg/kg	UJ					
SA-1-6(6-8)	300 U	µg/kg	UJ					
SA-1-7(10-12)	300 U	µg/kg	UJ					
SA-1-7(1-3)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Dibenzo(a,h)anthracene	bb050428.m		46.9	SA-17-1(1-3)	300 U	µg/kg	UJ
					SA-17-1(14-16)	300 U	µg/kg	UJ
					SA-17-2(1-3)	300 U	µg/kg	UJ
					SA-17-2(14-16)	300 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-17-3(14-16)	300 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	100 J	µg/kg	J
					SA-18-1(14-16)	300 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	300 J	µg/kg	J
					SA-18-2(14-16)	300 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	300 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-19-2(14-16)	300 U	µg/kg	UJ
					SA-2-1(1-3)	300 U	µg/kg	UJ
					SA-2-1(14-16)	300 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-3-1(14-16)	300 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	80 J	µg/kg	J
					SA-3-2(14-16)	300 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-4-1(14-16)	300 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	300 U	µg/kg	UJ
					SA-4-2(14-16)	300 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	300 U	µg/kg	UJ
					SA-4-3(14-16)	300 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-5-2(14-16)	300 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	300 U	µg/kg	UJ
SA-6-1(0.5-2.5)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Dibenzo(a,h)anthracene	bb050428.m		46.9	SA-6-1(14-16)	300 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	300 U	µg/kg	UJ
					SA-6-3(14-16)	300 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	100 J	µg/kg	J
					SA-7-1(14-16)	300 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	1000	µg/kg	J
					SA-7-2(14-16)	300 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	300 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	300 U	µg/kg	UJ
					SA-7-6(12-14)	300 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-1(14-16)	300 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-2(14-16)	300 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-3(14-16)	300 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-4(14-16)	300 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	300 U	µg/kg	UJ
					SA-9-1(14-16)	300 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	300 U	µg/kg	UJ
SA-9-2(14-16)	300 U	µg/kg	UJ					
SA-9-3(0.6-2.6)	300 U	µg/kg	UJ					
SA-9-3(14-16)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Dibenzo(a,h)anthracene	bb050428.m		46.9	SA-9-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-4(14-16)	300 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-6(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-6(10-12)	100 J	µg/kg	J
					SA-9-7(0.6-2.6)	300 U	µg/kg	UJ
					SA-9-7(8-10)	1500 J	µg/kg	J
SVOC	Benzo(g,h,i)perylene	bb050428.m		44.5	Dup1(041905)	300 U	µg/kg	UJ
					Dup10(042805)	500 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	300 U	µg/kg	UJ
					Dup12(042805)	300 U	µg/kg	UJ
					Dup2(042005)	300 U	µg/kg	UJ
					Dup3(042005)	300 U	µg/kg	UJ
					Dup4(042105)	300 U	µg/kg	UJ
					Dup5(042205)	300 U	µg/kg	UJ
					Dup6(042505)	300 U	µg/kg	UJ
					Dup7(042605)	300 U	µg/kg	UJ
					Dup8(042605)	300 U	µg/kg	UJ
					Dup9(042705)	500	µg/kg	J
					SA-10-1(0.8-2.8)	70 J	µg/kg	J
					SA-10-1(14-16)	300 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-10-2(14-16)	300 U	µg/kg	UJ
					SA-1-1(1.1-3.1)	300 U	µg/kg	UJ
					SA-1-1(8-10)	300 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	300 U	µg/kg	UJ
SA-1-2(10-12)	300 U	µg/kg	UJ					
SA-1-2(10-12)	300 U	µg/kg	UJ					
SA-1-2(1-3)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Benzo(g,h,i)perylene	bb050428.m	44.5		SA-1-2(1-3)	300 U	µg/kg	UJ
					SA-12-1(0.5-2.5)	300 U	µg/kg	UJ
					SA-12-1(8-10)	3000	µg/kg	J
					SA-12-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	300 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	200 J	µg/kg	J
					SA-13-1(14-16)	300 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-13-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-13-2(14-16)	300 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	300 U	µg/kg	UJ
					SA-13-3(14-16)	300 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	3000	µg/kg	J
					SA-14-1(12-14)	400	µg/kg	J
					SA-14-1(12-14)	300 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-3(14-16)	300 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-14-4(6-8)	100 J	µg/kg	J
					SA-14-5(0.5-2.5)	300 U	µg/kg	UJ
					SA-14-5(12-14)	300 U	µg/kg	UJ
					SA-14-5(12-14)	330 U	µg/kg	UJ
					SA-1-5(10-12)	300 U	µg/kg	UJ
					SA-1-5(1-3)	300 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-15-1(10-12)	300 U	µg/kg	UJ
SA-1-6(1-3)	300 U	µg/kg	UJ					
SA-1-6(6-8)	300 U	µg/kg	UJ					
SA-1-7(10-12)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Benzo(g,h,i)perylene	bb050428.m		44.5	SA-1-7(1-3)	300 U	µg/kg	UJ
					SA-17-1(1-3)	300 U	µg/kg	UJ
					SA-17-1(14-16)	300 U	µg/kg	UJ
					SA-17-2(1-3)	300 U	µg/kg	UJ
					SA-17-2(14-16)	300 U	µg/kg	UJ
					SA-17-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-17-3(14-16)	300 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	500	µg/kg	J
					SA-18-1(14-16)	300 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	1100	µg/kg	J
					SA-18-2(14-16)	300 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	300 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	300 U	µg/kg	UJ
					SA-19-2(14-16)	300 U	µg/kg	UJ
					SA-2-1(1-3)	300 U	µg/kg	UJ
					SA-2-1(14-16)	300 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-3-1(14-16)	300 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	200 J	µg/kg	J
					SA-3-2(14-16)	300 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-4-1(14-16)	300 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	300 U	µg/kg	UJ
					SA-4-2(14-16)	300 U	µg/kg	UJ
					SA-4-3(0.7-2.7)	300 U	µg/kg	UJ
					SA-4-3(14-16)	300 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	300 U	µg/kg	UJ
					SA-5-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-5-2(14-16)	300 U	µg/kg	UJ
SA-5-3(0.7-2.7)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Benzo(g,h,i)perylene	bb050428.m	44.5		SA-6-1(0.5-2.5)	100 J	µg/kg	J
					SA-6-1(14-16)	300 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	300 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	200 J	µg/kg	J
					SA-6-3(14-16)	300 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	300 J	µg/kg	J
					SA-7-1(14-16)	300 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	2200	µg/kg	J
					SA-7-2(14-16)	300 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	300 U	µg/kg	UJ
					SA-7-3(8-10)	1000 U	µg/kg	UJ
					SA-7-3(8-10)	300 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-5(14-16)	300 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	300 U	µg/kg	UJ
					SA-7-6(12-14)	300 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-1(14-16)	300 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-2(14-16)	300 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	300 U	µg/kg	UJ
					SA-8-3(14-16)	300 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	300 U	µg/kg	UJ
					SA-8-4(14-16)	300 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	300 U	µg/kg	UJ
SA-9-1(14-16)	300 U	µg/kg	UJ					
SA-9-2(0.5-2.5)	300 U	µg/kg	UJ					
SA-9-2(14-16)	300 U	µg/kg	UJ					
SA-9-3(0.6-2.6)	300 U	µg/kg	UJ					

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Compound</i>	<i>Calibration ID</i>	<i>Average RF</i>	<i>% D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Benzo(g,h,i)perylene	bb050428.m		44.5	SA-9-3(14-16)	300 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-4(14-16)	300 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	300 U	µg/kg	UJ
					SA-9-6(0.6-2.6)	200 J	µg/kg	J
					SA-9-6(10-12)	300	µg/kg	J
					SA-9-7(0.6-2.6)	300 U	µg/kg	UJ
	SA-9-7(8-10)	4200 J	µg/kg	J				

## Notes:

%D Percent Difference.

J Estimated.

R Rejected.

RF Response Factor.

SVOCs Semi-Volatile Organic Compounds.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

VOCs Volatile Organic Compounds.

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	SPCC29a	Bromomethane (Methyl Bromide)	0.037	53.4	SA-1-1(1.1-3.1)	300 U	µg/kg	R
					SA-1-2(10-12)	300 U	µg/kg	R
					SA-1-2(1-3)	300 U	µg/kg	R
					SA-1-5(10-12)	300 U	µg/kg	R
					SA-1-5(1-3)	300 U	µg/kg	R
					SA-1-6(1-3)	300 U	µg/kg	R
					SA-1-6(6-8)	300 U	µg/kg	R
VOC	SPCC02a	Bromomethane (Methyl Bromide)	0.04	66.6	SA-1-7(1-3)	300 U	µg/kg	R
					SA-17-1(14-16)	300 U	µg/kg	R
					SA-17-2(1-3)	300 U	µg/kg	R
					SA-17-3(0.8-2.8)	300 U	µg/kg	R
					SA-17-3(14-16)	300 U	µg/kg	R
					SA-17-4(0.75-2.75)	300 U	µg/kg	R
					SA-2-1(1-3)	300 U	µg/kg	R
					SA-2-1(14-16)	300 U	µg/kg	R
Dup1(041905)	300 U	µg/kg	R					
VOC	SPCC03a	Bromomethane (Methyl Bromide)	0.031	27.4	SA-13-3(0.6-2.6)	300 U	µg/kg	R
					SA-1-7(10-12)	5000 U	µg/kg	R
					SA-17-2(14-16)	500 U	µg/kg	R
					SA-19-1(0.6-2.6)	300 U	µg/kg	R
					SA-19-2(0.5-2.5)	300 U	µg/kg	R
					SA-19-2(14-16)	300 U	µg/kg	R
					SA-7-4(0.7-2.7)	300 U	µg/kg	R
					Dup2(042005)	300 U	µg/kg	R

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	SPCC03a	Acetone		27.5	SA-13-3(0.6-2.6)	800 U	µg/kg	UJ
					SA-1-7(10-12)	20000 U	µg/kg	UJ
					SA-17-2(14-16)	2000 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	800 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	800 U	µg/kg	UJ
					SA-19-2(14-16)	800 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	800 U	µg/kg	UJ
		1,2-Dibromo-3-chloropropane (DBCP)	0.049	38	Dup2(042005)	800 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	50 U	µg/kg	R
					SA-1-7(10-12)	1000 U	µg/kg	R
					SA-17-2(14-16)	100 U	µg/kg	R
					SA-19-1(0.6-2.6)	50 U	µg/kg	R
					SA-19-2(0.5-2.5)	50 U	µg/kg	R
					SA-19-2(14-16)	50 U	µg/kg	R
VOC	SPCC03b	Bromomethane (Methyl Bromide)	0.04	67.4	SA-7-1(0.6-2.6)	300 U	µg/kg	R
					SA-7-1(14-16)	300 U	µg/kg	R
					SA-9-2(0.5-2.5)	300 U	µg/kg	R
					SA-9-2(14-16)	300 U	µg/kg	R
					Dup3(042005)	300 U	µg/kg	R
VOC	SPCC03b	1,2-Dibromo-3-chloropropane (DBCP)		33.8	SA-7-1(0.6-2.6)	50 U	µg/kg	UJ
					SA-7-1(14-16)	50 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	50 U	µg/kg	UJ
					SA-9-2(14-16)	50 U	µg/kg	UJ
					Dup3(042005)	50 U	µg/kg	UJ

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	SPCC04a	Bromomethane (Methyl Bromide)	0.031	31.2	SA-13-3(14-16)	1000 U	µg/kg	R
					SA-3-1(0.75-2.75)	300 U	µg/kg	R
					SA-3-1(14-16)	300 U	µg/kg	R
					SA-8-3(0.75-2.75)	300 U	µg/kg	R
					SA-8-3(14-16)	300 U	µg/kg	R
					SA-8-4(0.7-2.7)	300 U	µg/kg	R
					SA-8-4(14-16)	300 U	µg/kg	R
					SA-9-1(0.8-2.8)	300 U	µg/kg	R
					SA-9-1(14-16)	300 U	µg/kg	R
					SA-9-3(0.6-2.6)	300 U	µg/kg	R
					SA-9-3(14-16)	300 U	µg/kg	R
					SA-9-4(0.75-2.75)	300 U	µg/kg	R
					SA-9-4(14-16)	300 U	µg/kg	R
					Acetone	45.9	SA-13-3(14-16)	4000 U
		SA-3-1(0.75-2.75)	900 U	µg/kg			UJ	
		SA-3-1(14-16)	900 U	µg/kg			UJ	
		SA-8-3(0.75-2.75)	900 U	µg/kg			UJ	
		SA-8-3(14-16)	800 U	µg/kg			UJ	
		SA-8-4(0.7-2.7)	900 U	µg/kg			UJ	
		SA-8-4(14-16)	800 U	µg/kg			UJ	
		SA-9-1(0.8-2.8)	800 U	µg/kg			UJ	
		SA-9-1(14-16)	800 U	µg/kg			UJ	
		SA-9-3(0.6-2.6)	800 U	µg/kg			UJ	
		SA-9-3(14-16)	800 U	µg/kg			UJ	
		SA-9-4(0.75-2.75)	800 U	µg/kg			UJ	
		SA-9-4(14-16)	800 U	µg/kg	UJ			

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>		
VOC	SPCC04a	Dichlorodifluoromethane (CFC-12)		34.8	SA-13-3(14-16)	300 U	µg/kg	UJ		
					SA-3-1(0.75-2.75)	60 U	µg/kg	UJ		
					SA-3-1(14-16)	60 U	µg/kg	UJ		
					SA-8-3(0.75-2.75)	60 U	µg/kg	UJ		
					SA-8-3(14-16)	50 U	µg/kg	UJ		
					SA-8-4(0.7-2.7)	60 U	µg/kg	UJ		
					SA-8-4(14-16)	50 U	µg/kg	UJ		
					SA-9-1(0.8-2.8)	50 U	µg/kg	UJ		
					SA-9-1(14-16)	50 U	µg/kg	UJ		
					SA-9-3(0.6-2.6)	50 U	µg/kg	UJ		
					SA-9-3(14-16)	50 U	µg/kg	UJ		
					SA-9-4(0.75-2.75)	50 U	µg/kg	UJ		
					SA-9-4(14-16)	50 U	µg/kg	UJ		
					1,2-Dibromo-3-chloropropane (DBCP)				35.7	SA-13-3(14-16)
		SA-3-1(0.75-2.75)	60 U	µg/kg						UJ
		SA-3-1(14-16)	60 U	µg/kg						UJ
		SA-8-3(0.75-2.75)	60 U	µg/kg						UJ
		SA-8-3(14-16)	50 U	µg/kg						UJ
		SA-8-4(0.7-2.7)	60 U	µg/kg						UJ
		SA-8-4(14-16)	50 U	µg/kg						UJ
		SA-9-1(0.8-2.8)	50 U	µg/kg						UJ
		SA-9-1(14-16)	50 U	µg/kg						UJ
		SA-9-3(0.6-2.6)	50 U	µg/kg						UJ
		SA-9-3(14-16)	50 U	µg/kg						UJ
		SA-9-4(0.75-2.75)	50 U	µg/kg						UJ
		SA-9-4(14-16)	50 U	µg/kg	UJ					

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	SPCC04b	Bromomethane (Methyl Bromide)	0.039	62.2	SA-10-1(0.8-2.8)	300 U	µg/kg	R
					SA-10-1(14-16)	300 U	µg/kg	R
					SA-10-2(0.7-2.7)	300 U	µg/kg	R
					SA-10-2(14-16)	300 U	µg/kg	R
					Dup4(042105)	300 U	µg/kg	R
		1,2-Dibromo-3-chloropropane (DBCP)	34.3	SA-10-1(0.8-2.8)	60 U	µg/kg	UJ	
				SA-10-1(14-16)	50 U	µg/kg	UJ	
				SA-10-2(0.7-2.7)	50 U	µg/kg	UJ	
				SA-10-2(14-16)	50 U	µg/kg	UJ	
				Dup4(042105)	50 U	µg/kg	UJ	
VOC	SPCC06a	Dichlorodifluoromethane (CFC-12)		28	SA-12-1(0.5-2.5)	60 U	µg/kg	UJ
					SA-12-1(8-10)	60 U	µg/kg	UJ
					SA-12-2(0.7-2.7)	50 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	50 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	50 U	µg/kg	UJ
					SA-13-1(14-16)	5000 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	50 U	µg/kg	UJ
					SA-15-1(10-12)	50 U	µg/kg	UJ
					SA-7-3(0.8-2.8)	60 U	µg/kg	UJ
					SA-7-3(8-10)	60 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	50 U	µg/kg	UJ
					SA-7-5(14-16)	50 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	50 U	µg/kg	UJ
					SA-7-6(12-14)	200 U	µg/kg	UJ
					TB(042605)	50 U	µg/kg	UJ
Dup6(042505)	50 U	µg/kg	UJ					

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>	
VOC	SPCC11c	Acetone		59.6	SA-4-1(0.75-2.75)	800 U	µg/kg	UJ	
					SA-4-2(0.9-2.9)	800 U	µg/kg	UJ	
					SA-4-2(14-16)	800 U	µg/kg	UJ	
					SA-4-3(0.7-2.7)	900 U	µg/kg	UJ	
					SA-4-3(14-16)	800 U	µg/kg	UJ	
					SA-5-1(0.75-2.75)	800 U	µg/kg	UJ	
					SA-5-2(0.7-2.7)	800 U	µg/kg	UJ	
					SA-5-2(14-16)	800 U	µg/kg	UJ	
					SA-5-3(0.7-2.7)	800 U	µg/kg	UJ	
					TB-(042805)	800 U	µg/kg	UJ	
		1,2-Dibromo-3-chloropropane (DBCP)			26.6	SA-4-1(0.75-2.75)	50 U	µg/kg	UJ
						SA-4-2(0.9-2.9)	50 U	µg/kg	UJ
						SA-4-2(14-16)	50 U	µg/kg	UJ
						SA-4-3(0.7-2.7)	60 U	µg/kg	UJ
						SA-4-3(14-16)	60 U	µg/kg	UJ
						SA-5-1(0.75-2.75)	50 U	µg/kg	UJ
						SA-5-2(0.7-2.7)	50 U	µg/kg	UJ
						SA-5-2(14-16)	50 U	µg/kg	UJ
						SA-5-3(0.7-2.7)	50 U	µg/kg	UJ
						TB-(042805)	50 U	µg/kg	UJ

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	SPCC09a	Acetone		27.6	SA-13-2(0.75-2.75)	800 U	µg/kg	UJ
					SA-13-2(14-16)	800 U	µg/kg	UJ
					SA-6-1(0.5-2.5)	900 U	µg/kg	UJ
					SA-6-1(14-16)	800 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	800 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	900 U	µg/kg	UJ
					SA-6-3(14-16)	900 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	900 U	µg/kg	UJ
					SA-7-2(14-16)	800 U	µg/kg	UJ
					SA-8-1(0.7-2.7)	800 U	µg/kg	UJ
					SA-8-1(14-16)	900 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	800 U	µg/kg	UJ
					SA-8-2(14-16)	900 U	µg/kg	UJ
					Dup7(042605)	900 U	µg/kg	UJ
					Dup8(042605)	800 U	µg/kg	UJ
VOC	SPCC10a	Acetone		33.4	SA-14-1(0.5-2.5)	800 U	µg/kg	UJ
					SA-14-1(12-14)	800 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	800 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	800 U	µg/kg	UJ
					SA-14-3(14-16)	800 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	900 U	µg/kg	UJ
					SA-18-1(14-16)	800 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	800 U	µg/kg	UJ
					SA-18-2(14-16)	900 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	900 U	µg/kg	UJ
					SA-3-2(14-16)	800 U	µg/kg	UJ
Dup9(042705)	900 U	µg/kg	UJ					

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>			
VOC	SPCC11c	Acetone		38.2	SA-14-4(0.7-2.7)	800 U	µg/kg	UJ			
					SA-14-4(6-8)	800 U	µg/kg	UJ			
					SA-14-5(0.5-2.5)	900 U	µg/kg	UJ			
					SA-14-5(12-14)	800 U	µg/kg	UJ			
					TB(042705)	800 U	µg/kg	UJ			
		1,2-Dibromo-3-chloropropane (DBCP)		26.6	SA-14-4(0.7-2.7)	50 U	µg/kg	UJ			
				SA-14-4(6-8)	60 U	µg/kg	UJ				
				SA-14-5(0.5-2.5)	60 U	µg/kg	UJ				
				SA-14-5(12-14)	50 U	µg/kg	UJ				
				TB(042705)	50 U	µg/kg	UJ				
		SVOC		spclp03b.d	4-Chloroaniline		59.7	SA-1-1(1.1-3.1)	700 U	µg/kg	UJ
								SA-1-1(8-10)	700 U	µg/kg	UJ
								SA-1-2(1-3)	700 U	µg/kg	UJ
								SA-1-2(1-3)DL	700 U	µg/kg	UJ
SA-1-2(10-12)	700 U		µg/kg					UJ			
SA-1-2(10-12)RE	700 U		µg/kg					UJ			
SA-1-5(1-3)	700 U		µg/kg					UJ			
SA-1-5(10-12)	700 U		µg/kg					UJ			
SA-1-6(1-3)	700 U		µg/kg					UJ			
SA-1-6(6-8)	700 U		µg/kg					UJ			
SA-1-7(1-3)	700 U		µg/kg					UJ			
SA-1-7(10-12)	700 U		µg/kg					UJ			
SA-2-1(1-3)	700 U		µg/kg					UJ			
SA-2-1(14-16)	700 U		µg/kg					UJ			
SA-17-1(1-3)	700 U		µg/kg					UJ			
SA-17-2(1-3)	700 U		µg/kg					UJ			
SA-17-1(14-16)	700 U		µg/kg					UJ			
SA-17-2(14-16)	700 U		µg/kg					UJ			

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	spclp04a.d	4-Chloroaniline		58.8	SA-17-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-17-3(14-16)	700 U	µg/kg	UJ
					SA-17-4(0.75-2.75)	700 U	µg/kg	UJ
					Dup1(041905)	700 U	µg/kg	UJ
					Dup2(042005)	700 U	µg/kg	UJ
					SA-19-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-19-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-19-2(14-16)	700 U	µg/kg	UJ
					SA-7-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-13-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-13-3(14-16)	700 U	µg/kg	UJ
					SA-7-1(0.6-2.6)	700 U	µg/kg	UJ
					SA-7-1(14-16)	700 U	µg/kg	UJ
					SA-9-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-9-2(14-16)	700 U	µg/kg	UJ
SVOC	spclp04b.d	4-Chloroaniline		59.1	Dup3(042005)	700 U	µg/kg	UJ
					SA-8-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-4(14-16)	700 U	µg/kg	UJ
					SA-8-3(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-3(14-16)	700 U	µg/kg	UJ
					SA-9-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-9-1(14-16)	700 U	µg/kg	UJ
					SA-9-3(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-3(14-16)	700 U	µg/kg	UJ
					SA-3-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-3-1(14-16)	700 U	µg/kg	UJ
					SA-9-4(0.75-2.75)	700 U	µg/kg	UJ
					SA-9-4(14-16)	700 U	µg/kg	UJ

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	spclp05a.d	4-Chloroaniline		59.8	Dup4(042105)	700 U	µg/kg	UJ
					SA-10-1(0.8-2.8)	700 U	µg/kg	UJ
					SA-10-1(14-16)	700 U	µg/kg	UJ
					SA-10-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-10-2(14-16)	700 U	µg/kg	UJ
					SA-9-5(0.75-2.75)	700 U	µg/kg	UJ
					Dup5(042205)	700 U	µg/kg	UJ
					SA-11-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-9-6(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-6(10-12)	700 U	µg/kg	UJ
					SA-9-7(0.6-2.6)	700 U	µg/kg	UJ
					SA-9-7(8-10)	700 U	µg/kg	UJ
					SA-12-1(0.5-2.5)	700 U	µg/kg	UJ
					SA-12-1(8-10)	700 U	µg/kg	UJ
SVOC	spclp05a.d	4-Chloroaniline		59.8	SA-12-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-12-2(11.5-13.5)	700 U	µg/kg	UJ
SVOC	sptc106a.d	4-Chloroaniline		60.6	SA-7-3(0.8-2.8)	700 U	µg/kg	UJ
					SA-7-3(8-10)	700 U	µg/kg	UJ
					SA-7-3(8-10)DL	700 U	µg/kg	UJ
					SA-15-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-15-1(10-12)	700 U	µg/kg	UJ
					SA-13-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-7-6(0.75-2.75)	700 U	µg/kg	UJ
SA-7-6(12-14)	700 U	µg/kg	UJ					
SVOC	sptc109a.d	4-Chloroaniline		60.2	SA-7-5(14-16)	700 U	µg/kg	UJ
					Dup6(042505)	700 U	µg/kg	UJ

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	sptc112c.d	4-Chloroaniline		63.8	SA-7-5(14-16)DL	700 U	µg/kg	UJ
					SA-15-1(10-12)DL	700 U	µg/kg	UJ
SVOC	sptc106a.d	4-Chloroaniline		60.6	SA-13-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-13-2(14-16)	700 U	µg/kg	UJ
					SA-8-2(0.75-2.75)	700 U	µg/kg	UJ
					SA-8-2(14-16)	700 U	µg/kg	UJ
					Dup7(042605)	700 U	µg/kg	UJ
SVOC	sptc109a.d	4-Chloroaniline		60.2	SA-8-1(0.7-2.7)	700 U	µg/kg	UJ
					SA-8-1(14-16)	700 U	µg/kg	UJ
					SA-6-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-6-1(0.5-2.5)	700 U	µg/kg	UJ
					SA-6-1(14-16)	700 U	µg/kg	UJ
					SA-6-3(0.75-2.75)	700 U	µg/kg	UJ
					SA-6-3(14-16)	700 U	µg/kg	UJ
					Dup8(042605)	700 U	µg/kg	UJ
					SA-7-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-7-2(14-16)	700 U	µg/kg	UJ
					SA-14-1(0.5-2.5)	700 U	µg/kg	UJ
SA-14-5(12-14)RE	330 U	µg/kg	UJ					

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
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<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	sptc110c.d	4-Chloroaniline		61.3	SA-14-1(12-14)	700 U	µg/kg	UJ
					Dup9(042705)	700 U	µg/kg	UJ
					SA-18-1(0.4-2.4)	700 U	µg/kg	UJ
					SA-18-1(14-16)	700 U	µg/kg	UJ
					SA-18-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-18-2(14-16)	700 U	µg/kg	UJ
					SA-3-2(0.6-2.6)	700 U	µg/kg	UJ
					SA-3-2(14-16)	700 U	µg/kg	UJ
					SA-14-2(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(0.5-2.5)	700 U	µg/kg	UJ
					SA-14-3(14-16)	700 U	µg/kg	UJ
					SA-14-4(0.7-2.7)	700 U	µg/kg	UJ
					SA-14-4(6-8)	700 U	µg/kg	UJ
					SA-14-5(0.5-2.5)	700 U	µg/kg	UJ
SA-14-5(12-14)	330 U	µg/kg	UJ					
SVOC	sptc112c.d	4-Chloroaniline		63.8	SA-14-1(12-14)DL	700 U	µg/kg	UJ
SVOC	sptc106a.d	4-Chloroaniline		60.6	SA-5-2(0.7-2.7)	700 U	µg/kg	UJ
					SA-5-2(14-16)	700 U	µg/kg	UJ
					SA-5-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-5-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-4-1(0.75-2.75)	700 U	µg/kg	UJ
					SA-4-1(14-16)	700 U	µg/kg	UJ
					SA-4-2(0.9-2.9)	700 U	µg/kg	UJ
					SA-4-2(14-16)	700 U	µg/kg	UJ

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Calibration ID</i>	<i>Compound</i>	<i>RF</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	sptc106a.d	4-Chloroaniline		60.6	SA-4-3(0.7-2.7)	700 U	µg/kg	UJ
					SA-4-3(14-16)	700 U	µg/kg	UJ
					Dup10(042805)	400 U	µg/kg	UJ
					Dup11(042805)	700 U	µg/kg	UJ
					Dup12(042805)	700 U	µg/kg	UJ
					SA-13-1(14-16)	400 U	µg/kg	UJ
					SA-7-5(0.7-2.7)	700 U	µg/kg	UJ
SVOC	sptc109a.d	4-Chloroaniline		60.2	Dup10(042805)DL	700 U	µg/kg	UJ
					SA-13-1(14-16)DL	400 U	µg/kg	UJ

- Notes:
- %D Percent Difference.
  - R Rejected.
  - RF Response Factor.
  - SVOC Semi-Volatile Organic Compounds.
  - U Non-detect at associated value.
  - UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.
  - VOC Volatile Organic Compounds.

**TABLE 5**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE INORGANIC LABORATORY BLANKS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Sample Result</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	05/05/09	Selenium	0.14	SA-9-4(0.75-2.75)	0.13 J	0.20 U	mg/Kg
				SA-9-4(14-16)	0.26	0.26 U	mg/Kg
				Dup4(042105)	0.23	0.23 U	mg/Kg
				SA-10-2(14-16)	0.17 J	0.20 U	mg/Kg
				Dup5(042205)	0.19 J	0.20 U	mg/Kg
				SA-11-1(0.75-2.75)	0.24	0.24 U	mg/Kg
Metals	05/10/09	Selenium	0.17	SA-12-2(0.7-2.7)	0.45	0.45 U	mg/Kg
				SA-12-2(11.5-13.5)	0.40	0.40 U	mg/Kg
				SA-7-3(0.8-2.8)	0.42	0.42 U	mg/Kg
				SA-7-3(8-10)	0.15 J	0.20 U	mg/Kg
				SA-7-5(14-16)	0.30	0.30 U	mg/Kg
				SA-15-1(0.7-2.7)	0.30	0.30 U	mg/Kg
				SA-13-1(0.75-2.75)	0.49	0.49 U	mg/Kg
				Dup6(042505)	0.42	0.42 U	mg/Kg
				SA-7-6(0.75-2.75)	0.32	0.32 U	mg/Kg
				SA-7-6(12-14)	0.23	0.23 U	mg/Kg
				SA-13-2(0.75-2.75)	0.25	0.25 U	mg/Kg
				SA-13-2(14-16)	0.26	0.26 U	mg/Kg
				SA-8-2(0.75-2.75)	0.24	0.24 U	mg/Kg
				SA-8-2(14-16)	0.33	0.33 U	mg/Kg
				Dup7(042605)	0.33	0.33 U	mg/Kg
				SA-8-1(0.7-2.7)	0.16 J	0.20 U	mg/Kg
SA-8-1(14-16)	0.29	0.29 U	mg/Kg				
SA-6-2(0.7-2.7)	0.32	0.32 U	mg/Kg				
SA-6-1(0.5-2.5)	0.27	0.27 U	mg/Kg				

**TABLE 5**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE INORGANIC LABORATORY BLANKS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Sample Result</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	05/11/09	Selenium	0.19	SA-6-1(14-16)	0.36	0.36 U	mg/Kg
				SA-6-3(14-16)	0.15 J	0.20 U	mg/Kg
				Dup8(042605)	0.16 J	0.20 U	mg/Kg
				SA-7-2(14-16)	0.30	0.30 U	mg/Kg
				SA-14-1(0.5-2.5)	0.22	0.22 U	mg/Kg
				SA-14-1(12-14)	0.38	0.38 U	mg/Kg
				SA-18-1(14-16)	0.21	0.21 U	mg/Kg
				SA-18-2(14-16)	0.36	0.36 U	mg/Kg
				SA-14-2(0.5-2.5)	0.27	0.27 U	mg/Kg
				SA-14-3(0.5-2.5)	0.19 J	0.20 U	mg/Kg
				SA-14-3(14-16)	0.22	0.22 U	mg/Kg
				SA-14-4(6-8)	0.27	0.27 U	mg/Kg
				Metals	05/11/09	Antimony	0.16
SA-6-3(0.75-2.75)	0.23 J	0.30 U	mg/Kg				
SA-6-3(14-16)	0.14 J	0.30 U	mg/Kg				
Dup8(042605)	0.08 J	0.30 U	mg/Kg				
SA-7-2(0.5-2.5)	0.18 J	0.30 U	mg/Kg				
SA-14-1(0.5-2.5)	0.69	0.69 U	mg/Kg				
Dup9(042705)	0.67	0.67 U	mg/Kg				
SA-18-1(0.4-2.4)	0.72	0.72 U	mg/Kg				
SA-18-2(14-16)	0.09 J	0.30 U	mg/Kg				
SA-3-2(0.6-2.6)	0.16 J	0.30 U	mg/Kg				
SA-14-3(0.5-2.5)	0.1 J	0.30 U	mg/Kg				
Metals	05/12/09	Selenium	0.18	SA-4-1(14-16)	0.35	0.35 U	mg/Kg
				SA-4-3(14-16)	0.22	0.22 U	mg/Kg

**TABLE 5**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE INORGANIC LABORATORY BLANKS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Sample Result</i>	<i>Qualified Result</i>	Units
Metals	05/12/09	Thallium	0.02	SA-14-5(0.5-2.5)	0.03 J	0.50 U	mg/Kg
				SA-14-5(12-14)	0.08 J	0.50 U	mg/Kg
				SA-5-2(0.7-2.7)	0.05 J	0.50 U	mg/Kg
				SA-5-2(14-16)	0.05 J	0.50 U	mg/Kg
				SA-4-1(0.75-2.75)	0.06 J	0.50 U	mg/Kg
				SA-4-1(14-16)	0.05 J	0.50 U	mg/Kg
				SA-4-2(0.9-2.9)	0.02 J	0.50 U	mg/Kg
				SA-4-2(14-16)	0.02 J	0.50 U	mg/Kg
				SA-4-3(0.7-2.7)	0.03 J	0.50 U	mg/Kg
				SA-4-3(14-16)	0.04 J	0.50 U	mg/Kg
				Dup10(042805)	0.04 J	0.50 U	mg/Kg
				Dup12(042805)	0.05 J	0.50 U	mg/Kg
				SA-13-1(14-16)	0.07 J	0.50 U	mg/Kg
				SA-7-5(0.7-2.7)	0.03 J	0.50 U	mg/Kg

## Notes:

- J Estimated.  
U Non-detect at associated value.

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE ORGANIC METHOD BLANKS  
 LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING  
 GENERAL MOTORS CORPORATION  
 LANSING, MICHIGAN  
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<i>Parameter</i>	<i>Blank ID</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
SVOC	blk-29a.d	Di-n-butylphthalate	13	SA-1-7(1-3)	300U	µg/kg
				SA-2-1(1-3)	300U	µg/kg
				SA-17-1(1-3)	300U	µg/kg
				SA-17-2(1-3)	300U	µg/kg
				SA-17-3(0.8-2.8)	300U	µg/kg
				SA-17-4(0.75-2.75)	300U	µg/kg
				Dup1(041905)	300U	µg/kg
				SA-19-2(0.5-2.5)	300U	µg/kg
				SA-19-2(14-16)	300U	µg/kg
SVOC	blk-29a.d	bis(2-Ethylhexyl)phthalate	14	SA-17-1(1-3)	300U	µg/kg
SVOC	blk-29b.d	Di-n-butylphthalate	13	Dup2(042005)	300U	µg/kg
				SA-7-1(0.6-2.6)	300U	µg/kg
				SA-7-1(14-16)	300U	µg/kg
				SA-9-2(14-16)	300U	µg/kg
				Dup3(042005)	300U	µg/kg
				SA-8-4(0.7-2.7)	300U	µg/kg
				SA-8-4(14-16)	300U	µg/kg
				SA-8-3(14-16)	300U	µg/kg
				SA-9-3(0.6-2.6)	300U	µg/kg
				SA-9-3(14-16)	300U	µg/kg
SA-3-1(0.75-2.75)	300U	µg/kg				
SVOC	blk-03.d	Di-n-butylphthalate	7	SA-9-4(14-16)	300U	µg/kg
				SA-9-6(10-12)	300U	µg/kg
				SA-9-7(0.6-2.6)	300U	µg/kg
				SA-12-1(0.5-2.5)	300U	µg/kg
				SA-12-1(8-10)	300U	µg/kg
SVOC	blk-05a.d	di-n-butyl phthalate	48	SA-7-5(14-16)	300U	µg/kg
				SA-7-5(14-16)DL	300U	µg/kg
				SA-15-1(0.7-2.7)	300U	µg/kg
				SA-13-1(0.75-2.75)	300U	µg/kg
				Dup6(042505)	300U	µg/kg
				SA-7-6(0.75-2.75)	300U	µg/kg
				SA-7-6(12-14)	300U	µg/kg
SVOC	blk-05a.d	bis(2-ethylhexyl)phthalate	19	SA-7-5(14-16)	300U	µg/kg
				SA-7-5(14-16)DL	300U	µg/kg
				SA-13-1(0.75-2.75)	300U	µg/kg
				Dup6(042505)	300U	µg/kg
				SA-7-6(12-14)	300U	µg/kg
SVOC	blk-05a.d	di-n-butyl phthalate	48	SA-3-2(14-16)	300U	µg/kg
				SA-6-1(0.5-2.5)	300U	µg/kg
SVOC	blk-05a.d	bis(2-ethylhexyl)phthalate	19	SA-6-3(0.75-2.75)	300U	µg/kg
				SA-6-3(14-16)	300U	µg/kg

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE ORGANIC METHOD BLANKS  
LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING  
GENERAL MOTORS CORPORATION  
LANSING, MICHIGAN  
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<i>Parameter</i>	<i>Blank ID</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
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**TABLE 6**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE ORGANIC METHOD BLANKS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Blank ID</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
SVOC	blk-05b.d	bis(2-Ethylhexyl)phthalate	25	SA-14-1(0.5-2.5)	300U	µg/kg
				Dup9(042705)	300U	µg/kg
				SA-18-1(14-16)	300U	µg/kg
				SA-18-2(0.7-2.7)	300U	µg/kg
				SA-3-2(0.6-2.6)	300U	µg/kg
				SA-14-2(0.5-2.5)	300U	µg/kg
SVOC	blk-05b.d	Di-n-butylphthalate	30	SA-14-1(0.5-2.5)	300U	µg/kg
				SA-18-1(14-16)	300U	µg/kg
				SA-18-2(0.7-2.7)	300U	µg/kg
				SA-18-2(14-16)	300U	µg/kg
				SA-13-2(14-16)	300U	µg/kg
				SA-14-2(0.5-2.5)	300U	µg/kg
				SA-14-3(0.5-2.5)	300U	µg/kg
				SA-14-3(14-16)	300U	µg/kg
				SA-14-4(0.7-2.7)	300U	µg/kg
				SA-14-5(0.5-2.5)	300U	µg/kg
SVOC	blk-06a.d	Di-n-butylphthalate	17	SA-4-1(0.75-2.75)	300U	µg/kg
				SA-5-3(0.7-2.7)	300U	µg/kg
SVOC	blk-06a.d	bis(2-Ethylhexyl)phthalate	11	SA-5-1(0.75-2.75)	300U	µg/kg
				SA-5-3(0.7-2.7)	300U	µg/kg
				SA-13-1(14-16)	300U	µg/kg
SVOC	blk-06a.d	Diethylphthalate	19	SA-4-1(0.75-2.75)	300U	µg/kg
				SA-7-5(0.7-2.7)	300U	µg/kg
				SA-13-1(14-16)	300U	µg/kg

## Notes:

SVOC Semi-Volatile Organic Compounds.

U Non-detect at associated value.

**TABLE 7**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING SURROGATE RECOVERIES**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Surrogate</i>	<i>Surrogate Recovery (percent)</i>	<i>Control Limits (percent)</i>	<i>Sample ID</i>	<i>Analytes</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
PCBs	DCB	21.7	30 - 137	SA-1-5(10-12')	Aroclor 1221	330 U	µg/Kg	UJ
					Aroclor 1232	330 U	µg/Kg	UJ
					Aroclor 1242	330 U	µg/Kg	UJ
					Aroclor 1248	330 U	µg/Kg	UJ
					Aroclor 1254	330 U	µg/Kg	UJ
					Aroclor 1260	330 U	µg/Kg	UJ
PCBs	DCB	18.6	30 - 137	SA-9-6(10-12')	Aroclor 1221	330 U	µg/Kg	UJ
					Aroclor 1232	330 U	µg/Kg	UJ
					Aroclor 1242	330 U	µg/Kg	UJ
					Aroclor 1248	330 U	µg/Kg	UJ
					Aroclor 1254	10 J	µg/Kg	*
					Aroclor 1260	330 U	µg/Kg	UJ
SVOC	2-Fluorobiphenyl	133.0	10-115	SA-1-2(1-3)	Di-n-butylphthalate	50 J	µg/kg	J
	Nitrobenzene-d5	133.1	18.5-120					
	Phenol-d5	121.6	16.9-113					
	2,4,6-Tribromophenol	125.3	13.4-122					
	Terphenyl-d14	143.0	10.3-137					
SVOC	2,4,6-Tribromophenol	7.2	13.4-122	SA-1-2(10-12')	2,4,5-Trichlorophenol	300 U	µg/kg	R
					2,4,6-Trichlorophenol	300 U	µg/kg	R
					2,4-Dichlorophenol	300 U	µg/kg	R
					2,4-Dimethylphenol	300 U	µg/kg	R
					2,4-Dinitrophenol	700 U	µg/kg	R
					2-Chlorophenol	300 U	µg/kg	R
					2-Methylphenol	300 U	µg/kg	R
					2-Nitrophenol	300 U	µg/kg	R
					3-Methylphenol	300 U	µg/kg	R
					4,6-Dinitro-2-methylphenol	700 U	µg/kg	R
					4-Chloro-3-methylphenol	300 U	µg/kg	R
					4-Nitrophenol	700 U	µg/kg	R
					Pentachlorophenol	700 U	µg/kg	R
					Phenol	300 U	µg/kg	R

**TABLE 7**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING SURROGATE RECOVERIES**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Surrogate</i>	<i>Surrogate Recovery (percent)</i>	<i>Control Limits (percent)</i>	<i>Sample ID</i>	<i>Analytes</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	2-Fluorophenol	11.7	13.2-121	SA-14-5(12-14)	2,4,5-Trichlorophenol	300 U	µg/kg	UJ
		13.6	16.9-113		2,4,6-Trichlorophenol	300 U	µg/kg	UJ
			2,4-Dichlorophenol		300 U	µg/kg	UJ	
			2,4-Dimethylphenol		300 U	µg/kg	UJ	
			2,4-Dinitrophenol		700 U	µg/kg	UJ	
			2-Chlorophenol		300 U	µg/kg	UJ	
			2-Methylphenol		300 U	µg/kg	UJ	
			2-Nitrophenol		300 U	µg/kg	UJ	
			3-Methylphenol		300 U	µg/kg	UJ	
			4,6-Dinitro-2-methylphenol		700 U	µg/kg	UJ	
			4-Chloro-3-methylphenol		300 U	µg/kg	UJ	
			4-Nitrophenol		700 U	µg/kg	UJ	
			Pentachlorophenol		700 U	µg/kg	UJ	
			Phenol		300 U	µg/kg	UJ	

## Notes:

\* Qualifier is associated with both the original and duplicate sample.

DCB Decachlorobiphenyl.

J Estimated.

R Rejected.

SVOCs Semi-Volatile Organic Compounds.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 8  
 QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INTERNAL STANDARD (IS) RECOVERIES  
 LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING  
 GENERAL MOTORS CORPORATION  
 LANSING, MICHIGAN  
 APRIL 2005

<i>Parameter</i>	<i>Sample ID</i>	<i>IS</i>	<i>IS Area Count (percent)</i>	<i>Control Limits (percent)</i>	<i>Analytes</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	SA-14-1(12-14)	Perylene-d12	30.8	50 - 200	Benzo(b)flouranthene	300 U	µg/kg	UJ
					Benzo(k)flouranthene	20 J	µg/kg	J
					Benzo(ghi)perylene	400	µg/kg	J
					Benzo(a)pyrene	30 J	µg/kg	J
					Dibenz(ah)anthracene	300	µg/kg	J

Notes:

IS Internal Standard.

J Estimated.

SVOC Semi-Volatile Organic Compounds.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 9  
 QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS  
 LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING  
 GENERAL MOTORS CORPORATION  
 LANSING, MICHIGAN  
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<i>Parameter</i>	<i>Compound</i>	<i>Percent Recovery</i>	<i>Control Limits (percent)</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	Isopropylbenzene	130	80-129.9	SA-13-3(14-16)	1700	µg/kg	J
				SA-1-7(10-12)	4000	µg/kg	J
				SA-17-2(14-16)	400	µg/kg	J
				SA-19-2(14-16)	10 J	µg/kg	J
				SA-9-5(0.75-2.75)	8 J	µg/kg	J
				SA-9-6(10-12)	70	µg/kg	J
				SA-9-7(8-10)	9 J	µg/kg	J
				Dup2(042005)	10 J	µg/kg	J
VOC	Cyclohexane	142	68-137	SA-7-3(8-10)	110	µg/kg	J
VOC	o-Xylene	123	80-121	SA-13-1(14-16)	366000	µg/kg	J
				SA-7-3(8-10)	80	µg/kg	J
				SA-7-5(0.7-2.7)	10 J	µg/kg	J
				SA-7-6(12-14)	79900	µg/kg	J
				Dup6(042505)	8 J	µg/kg	J
VOC	Isopropylbenzene	135	80-130	SA-13-1(14-16)	28000	µg/kg	J
				SA-7-3(8-10)	20 J	µg/kg	J
				SA-7-6(12-14)	6300	µg/kg	J
VOC	o-Xylene	128	80-121	SA-1-1(8-10)	10 J	µg/kg	J
				Dup11(042805)	20	µg/kg	J
	Isopropylbenzene			Dup12(042805)	157000	µg/kg	J
				Dup12(042805)	15000	µg/kg	J

Notes:

J Estimated.

VOC Volatile Organic Compound.

TABLE 10  
 QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES  
 LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING  
 GENERAL MOTORS CORPORATION  
 LANSING, MICHIGAN  
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Parameter	Associated Sample ID	Analyte	MS	MSD	RPD	Control Limits		Sample Result	Units	Qualifier
			Recovery (percent)	Recovery (percent)		Recovery (percent)	RPD (percent)			
SVOC	SA-7-2(14-16)	2,4-Dinitrophenol	9.3	15.7	51.2	10-120	25	700 U	µg/kg	R
SVOC	SA-14-1(0.5-2.5)	Acenaphthene	165.5	90.7	51.7	36.9-124.4	25	1900	µg/kg	J
		Dibenzofuran	134.6	89.3	37.2	38.2-124.1	25	1100	µg/kg	J
		Fluorene	163.9	94.2	48.2	37.8-127.8	25	1700	µg/kg	J
		Phenanthrene	623	181.7	84.9	36.4-143	25	13200	µg/kg	J
		Anthracene	216.2	106.5	58.1	32.3-142.4	25	3100	µg/kg	J
		Carbazole	160.8	103.8	38.8	31.3-164.4	25	1700	µg/kg	J
		Fluoranthene	536.8	185	75.3	35.5-144.5	25	12000	µg/kg	J
		Pyrene	401.2	151.3	70.8	35.4-138.1	25	8600	µg/kg	J
		Benzo(a)anthracene	259.8	127.7	56.1	36.7-134.7	25	4700	µg/kg	J
		3,3'-Dichlorobenzidine	28.6	42.4	38.9	35.3-120	25	700 U	µg/kg	UJ
		Chrysene	260.8	129.2	55.5	38.7-137.1	25	4800	µg/kg	J
		Benzo(b)fluoranthene	217.3	126.3	48.4	29-152.7	25	3700	µg/kg	J
		Benzo(k)fluoranthene	226.8	134.1	47.8	29.8-136	25	3000	µg/kg	J
		Benzo(a)pyrene	93.6	23	86.9	39.6-131.8	25	2600	µg/kg	J
		Indeno(1,2,3-cd)pyrene	204.1	140.7	32.0	39.2-137.4	25	2900	µg/kg	J
		Benzo(ghi)perylene	197	134.1	32.7	45.2-130.7	25	3000	µg/kg	J
		2,4-Dinitrophenol	7	7.1	1.4	10-120	25	700 U	µg/kg	R
		Dibenzo(ah)anthracene	163.2	137.9	15.5	45.3-130.8	25	1400	µg/kg	J
SVOC	SA-4-2(14-16)	Hexachlorocyclopentadiene	33.1	71.3	73.3	35.3-120	25	300 U	µg/kg	J
		2,4-Dinitrophenol	8.4	18	73	10-120	25	700 U	µg/kg	R
		Indeno(1,2,3-cd)pyrene	91.1	150.8	49.3	39.2-137.4	25	300 U	µg/kg	J
		Dibenzo(ah)anthracene	88.5	148.6	50.7	45.3-130.8	25	300 U	µg/kg	J
		Benzo(ghi)perylene	94.3	155.1	48.7	45.2-130.7	25	300 U	µg/kg	J

Notes:

- J Estimated.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate.
- R Rejected.
- RPD Relative Percent Difference.
- SVOC Semi-Volatile Organic Compound.
- U Non-detect at associated value.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

**TABLE 11**  
**QUALIFIED SAMPLE RESULTS DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analyte</i>	<i>Original Sample ID</i>	<i>Original Result</i>	<i>Duplicate Sample ID</i>	<i>Duplicate Result</i>	<i>RPD</i>	<i>Units</i>	<i>Qualifier <sup>(1)</sup></i>
VOC	Toluene	SA-19-2(14-16)	50U	Dup2(042005)	220	125	µg/kg	J
		SA-3-1(0.75-2.75)	60U	Dup4(042105)	430	151	µg/kg	J
SVOC	2-Methylnaphthalene	SA-5-2(0.7-2.7)	300U	Dup 10	37500	-	µg/kg	J
	Naphthalene	SA-5-2(0.7-2.7)	300U	Dup 10	31600	-	µg/kg	J
SVOC	Naphthalene	SA-4-1(14-16)	4400	Dup 12	11200	87	µg/kg	J
	2-Methylnaphthalene	SA-4-1(14-16)	3100	Dup 12	7600	84	µg/kg	J
Metals	Lead	SA-19-2(14-16)	6.80	Dup2(042005)	3.14	74	mg/Kg	J
	Lead - Coarse Fraction		2.29		5.51	83	mg/Kg	J
Metals	Copper	SA-9-2(0.5-2.5)	11.0	Dup3(042005)	1.6	149	mg/Kg	J
Metals	Aluminum	SA-9-5(0.75-2.75)	1010	Dup5(042205)	591	52	mg/Kg	J
	Magnesium		6910		13500	65	mg/Kg	J
Metals	Lead - Fine Fraction	SA-12-2(0.7-2.7)	12.3	Dup6(042505)	23.8	64	mg/Kg	J
	Magnesium		17600		7570	80	mg/Kg	J
Metals	Lead - Coarse Fraction	SA-5-2(0.7-2.7)	16.7	Dup10(042805)	30.4	58	mg/Kg	J
Metals	Chromium	SA-5-3(0.7-2.7)	4.36	Dup11(042805)	10.8	85	mg/Kg	J
	Copper		16.9		43.2	88	mg/Kg	J
	Magnesium		7790		4550	53	mg/Kg	J
	Silver		0.59		0.28	71	mg/Kg	J
	Vanadium		5.79		10.3	56	mg/Kg	J
	Zinc		29.8		50.0	51	mg/Kg	J

Notes:

<sup>(1)</sup> Qualifier is associated with both the original and duplicate sample.

- Not necessary.

J Estimated.

RPD Relative Percent Difference.

SVOC Semi-Volatile Organic Compounds.

U Non-detect at associated value.

VOC Volatile Organic Compounds.

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Aluminum	SA-12-2(0.7-2.7)	20	<10	SA-12-2(0.7-2.7)	579	mg/Kg	J
					SA-12-2(11.5-13.5)	964	mg/Kg	J
					SA-7-3(0.8-2.8)	586	mg/Kg	J
					SA-7-5(14-16)	1080	mg/Kg	J
					SA-15-1(0.7-2.7)	938	mg/Kg	J
					Dup6(042505)	720	mg/Kg	J
					SA-7-6(0.75-2.75)	627	mg/Kg	J
Metals	Chromium	SA-12-2(0.7-2.7)	48	<10	SA-12-2(0.7-2.7)	1.72 J	mg/Kg	J
					SA-12-2(11.5-13.5)	2.04	mg/Kg	J
					SA-7-3(0.8-2.8)	1.85 J	mg/Kg	J
					SA-15-1(0.7-2.7)	2.11	mg/Kg	J
					Dup6(042505)	1.57 J	mg/Kg	J
					SA-7-6(0.75-2.75)	1.76 J	mg/Kg	J
Metals	Chromium	SA-4-3(0.7-2.7)	19	<10	SA-5-2(0.7-2.7)	4.76	mg/Kg	J
					SA-5-2(14-16)	3.86	mg/Kg	J
					SA-5-3(0.7-2.7)	4.36	mg/Kg	J
					SA-5-1(0.75-2.75)	2.03	mg/Kg	J
					SA-4-1(0.75-2.75)	4.14	mg/Kg	J
					SA-4-1(14-16)	3.27	mg/Kg	J
					SA-4-2(0.9-2.9)	1.89 J	mg/Kg	J
					SA-4-2(14-16)	2.07	mg/Kg	J
					SA-4-3(0.7-2.7)	2.68	mg/Kg	J
					SA-4-3(14-16)	3.16	mg/Kg	J
					Dup10(042805)	4.63	mg/Kg	J
					Dup11(042805)	10.8	mg/Kg	J
					Dup12(042805)	3.07	mg/Kg	J
					SA-13-1(14-16)	3.63	mg/Kg	J
SA-7-5(0.7-2.7)	2.50	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Copper	SA-1-1(1.1-3.1)	20	<10	SA-1-1(1.1-3.1)	5.5	mg/Kg	J
					SA-1-2(1-3)	6.9	mg/Kg	J
					SA-1-2(10-12)	6.0	mg/Kg	J
					SA-1-5(10-12)	5.2	mg/Kg	J
					SA-1-6(1-3)	5.5	mg/Kg	J
					SA-1-6(6-8)	6.7	mg/Kg	J
					SA-1-7(1-3)	4.9	mg/Kg	J
					SA-2-1(1-3)	8.8	mg/Kg	J
					SA-17-2(14-16)	6.8	mg/Kg	J
					Dup2(042005)	5.6	mg/Kg	J
					SA-19-2(14-16)	6.6	mg/Kg	J
					SA-13-3(14-16)	4.0	mg/Kg	J
					SA-9-2(0.5-2.5)	11.0	mg/Kg	J
					SA-9-1(0.8-2.8)	4.5	mg/Kg	J
					SA-9-4(0.75-2.75)	7.4	mg/Kg	J
					SA-9-4(14-16)	9.7	mg/Kg	J
					SA-10-1(14-16)	8.2	mg/Kg	J
SA-10-2(14-16)	6.6	mg/Kg	J					
Metals	Copper	SA-17-4(0.75-2.75)	15	<10	SA-2-1(14-16)	1.2	mg/Kg	J
					SA-17-3(0.8-2.8)	1.4	mg/Kg	J
					SA-17-3(14-16)	1.1	mg/Kg	J
					SA-17-4(0.75-2.75)	1.6	mg/Kg	J
					Dup1(041905)	1.2	mg/Kg	J
					SA-19-1(0.6-2.6)	1.7	mg/Kg	J
					SA-19-2(0.5-2.5)	1.6	mg/Kg	J
					SA-7-4(0.7-2.7)	1.4	mg/Kg	J
					SA-13-3(0.6-2.6)	1.6	mg/Kg	J
					SA-7-1(14-16)	1.6	mg/Kg	J

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Copper	SA-17-4(0.75-2.75)	15	<10	Dup3(042005)	1.6	mg/Kg	J
					SA-8-4(0.7-2.7)	1.4	mg/Kg	J
					SA-8-3(0.75-2.75)	0.8 J	mg/Kg	J
					SA-9-6(0.6-2.6)	0.9 J	mg/Kg	J
					SA-12-1(0.5-2.5)	1.6	mg/Kg	J
Metals	Copper	SA-9-1(14-16)	81	<10	SA-1-1(8-10)	1.9	mg/Kg	J
					SA-1-5(1-3)	3.9	mg/Kg	J
					SA-1-7(10-12)	3.3	mg/Kg	J
					SA-17-1(1-3)	2.0	mg/Kg	J
					SA-17-2(1-3)	2.7	mg/Kg	J
					SA-17-1(14-16)	1.9	mg/Kg	J
					SA-7-1(0.6-2.6)	1.9	mg/Kg	J
					SA-9-2(14-16)	1.8	mg/Kg	J
					SA-8-4(14-16)	3.2	mg/Kg	J
					SA-8-3(14-16)	2.4	mg/Kg	J
					SA-9-1(14-16)	2.0	mg/Kg	J
					SA-9-3(0.6-2.6)	2.0	mg/Kg	J
					SA-9-3(14-16)	2.3	mg/Kg	J
					SA-3-1(0.75-2.75)	1.8	mg/Kg	J
					SA-3-1(14-16)	1.9	mg/Kg	J
					Dup4(042105)	2.2	mg/Kg	J
					SA-10-1(0.8-2.8)	1.8	mg/Kg	J
					SA-10-2(0.7-2.7)	2.0	mg/Kg	J
					SA-9-5(0.75-2.75)	2.5	mg/Kg	J
					Dup5(042205)	3.8	mg/Kg	J
SA-11-1(0.75-2.75)	2.6	mg/Kg	J					
SA-9-7(0.6-2.6)	2.6	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Copper	SA-12-2(0.7-2.7)	26	<10	SA-12-2(0.7-2.7)	3.5	mg/Kg	J
					SA-12-2(11.5-13.5)	2.7	mg/Kg	J
					SA-7-3(0.8-2.8)	3.0	mg/Kg	J
					SA-7-5(14-16)	3.1	mg/Kg	J
					SA-15-1(0.7-2.7)	4.3	mg/Kg	J
					Dup6(042505)	2.8	mg/Kg	J
					SA-7-6(0.75-2.75)	2.7	mg/Kg	J
					SA-7-6(12-14)	6.1	mg/Kg	J
Metals	Copper	SA-6-1(14-16)	13	<10	SA-13-2(14-16)	4.1	mg/Kg	J
					SA-8-2(0.75-2.75)	1.9	mg/Kg	J
					SA-8-2(14-16)	5.3	mg/Kg	J
					Dup7(042605)	4.7	mg/Kg	J
					SA-8-1(0.7-2.7)	2.1	mg/Kg	J
					SA-8-1(14-16)	3.0	mg/Kg	J
					SA-6-2(0.7-2.7)	3.1	mg/Kg	J
					SA-6-1(14-16)	3.7	mg/Kg	J
					SA-6-3(14-16)	3.1	mg/Kg	J
					Dup8(042605)	3.5	mg/Kg	J
					SA-7-2(14-16)	3.9	mg/Kg	J
					SA-14-1(12-14)	4.6	mg/Kg	J
					SA-18-1(14-16)	4.5	mg/Kg	J
					SA-18-2(14-16)	2.4	mg/Kg	J
					SA-14-2(0.5-2.5)	4.9	mg/Kg	J
					SA-14-3(14-16)	2.8	mg/Kg	J
					SA-14-4(0.7-2.7)	2.7	mg/Kg	J
SA-14-5(0.5-2.5)	2.9	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Copper	SA-4-3(0.7-2.7)	18	<10	SA-5-2(0.7-2.7)	8.9	mg/Kg	J
					SA-5-2(14-16)	7.8	mg/Kg	J
					SA-4-1(0.75-2.75)	9.2	mg/Kg	J
					SA-4-1(14-16)	4.9	mg/Kg	J
					SA-4-2(0.9-2.9)	4.0	mg/Kg	J
					SA-4-2(14-16)	3.2	mg/Kg	J
					SA-4-3(0.7-2.7)	6.2	mg/Kg	J
					SA-4-3(14-16)	5.6	mg/Kg	J
					Dup10(042805)	9.7	mg/Kg	J
					Dup12(042805)	4.7	mg/Kg	J
					SA-13-1(14-16)	5.2	mg/Kg	J
					SA-7-5(0.7-2.7)	3.3	mg/Kg	J
					Metals	Magnesium	SA-12-2(0.7-2.7)	27
SA-7-3(0.8-2.8)	14700	mg/Kg	J					
SA-15-1(10-12)	17000	mg/Kg	J					
SA-7-6(0.75-2.75)	11800	mg/Kg	J					
SA-7-6(12-14)	25800	mg/Kg	J					
Metals	Magnesium	SA-6-1(14-16)	30	<10	SA-13-2(14-16)	19500	mg/Kg	J
					SA-8-2(14-16)	17600	mg/Kg	J
					Dup7(042605)	18100	mg/Kg	J
					SA-8-1(14-16)	24000	mg/Kg	J
					SA-6-2(0.7-2.7)	13700	mg/Kg	J
					SA-6-1(14-16)	22600	mg/Kg	J
					SA-6-3(14-16)	21200	mg/Kg	J
					Dup8(042605)	22200	mg/Kg	J
					SA-7-2(14-16)	13300	mg/Kg	J
					SA-14-1(12-14)	19900	mg/Kg	J
					SA-18-1(14-16)	17200	mg/Kg	J

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Magnesium	SA-6-1(14-16)	30	<10	SA-3-2(14-16)	27100	mg/Kg	J
					SA-14-2(0.5-2.5)	11500	mg/Kg	J
					SA-14-3(14-16)	11900	mg/Kg	J
Metals	Magnesium	SA-14-5(0.5-2.5)	26	<10	SA-14-5(0.5-2.5)	19100	mg/Kg	J
					SA-14-5(12-14)	19400	mg/Kg	J
Metals	Manganese	SA-14-5(0.5-2.5)	23	<10	SA-14-5(0.5-2.5)	166	mg/Kg	J
					SA-14-5(12-14)	191	mg/Kg	J
Metals	Nickel	SA-6-1(14-16)	12	<10	SA-13-2(14-16)	6.74	mg/Kg	J
					SA-8-2(0.75-2.75)	2.99	mg/Kg	J
					SA-8-1(0.7-2.7)	2.82	mg/Kg	J
					SA-8-1(14-16)	4.42	mg/Kg	J
					SA-6-2(0.7-2.7)	4.14	mg/Kg	J
					SA-6-1(0.5-2.5)	4.91	mg/Kg	J
					SA-6-1(14-16)	5.13	mg/Kg	J
					SA-6-3(0.75-2.75)	3.98	mg/Kg	J
					SA-6-3(14-16)	4.52	mg/Kg	J
					Dup8(042605)	5.21	mg/Kg	J
					SA-7-2(0.5-2.5)	3.47	mg/Kg	J
					SA-7-2(14-16)	3.51	mg/Kg	J
					SA-14-1(12-14)	7.80	mg/Kg	J
					SA-18-1(14-16)	5.12	mg/Kg	J
					SA-18-2(14-16)	4.15	mg/Kg	J
SA-14-2(0.5-2.5)	3.54	mg/Kg	J					
SA-14-3(0.5-2.5)	5.11	mg/Kg	J					
SA-14-3(14-16)	3.81	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Nickel	SA-6-1(14-16)	12	<10	SA-14-4(6-8)	5.35	mg/Kg	J
					SA-14-5(0.5-2.5)	4.10	mg/Kg	J
					SA-14-5(12-14)	6.86	mg/Kg	J
Metals	Nickel	SA-4-3(0.7-2.7)	15	<10	SA-5-2(0.7-2.7)	5.63	mg/Kg	J
					SA-5-2(14-16)	5.77	mg/Kg	J
					SA-5-1(0.75-2.75)	2.04	mg/Kg	J
					SA-4-1(0.75-2.75)	5.91	mg/Kg	J
					SA-4-1(14-16)	4.61	mg/Kg	J
					SA-4-2(0.9-2.9)	2.94	mg/Kg	J
					SA-4-2(14-16)	2.96	mg/Kg	J
					SA-4-3(0.7-2.7)	4.09	mg/Kg	J
					SA-4-3(14-16)	4.26	mg/Kg	J
					Dup10(042805)	5.74	mg/Kg	J
					Dup12(042805)	4.31	mg/Kg	J
					SA-13-1(14-16)	5.74	mg/Kg	J
					SA-7-5(0.7-2.7)	3.60	mg/Kg	J
Metals	Vanadium	SA-4-3(0.7-2.7)	12	<10	SA-5-2(0.7-2.7)	6.41	mg/Kg	J
					SA-5-2(14-16)	4.73	mg/Kg	J
					SA-5-3(0.7-2.7)	5.79	mg/Kg	J
					SA-5-1(0.75-2.75)	1.79	mg/Kg	J
					SA-4-1(0.75-2.75)	5.93	mg/Kg	J
					SA-4-1(14-16)	4.36	mg/Kg	J
					SA-4-2(0.9-2.9)	2.20	mg/Kg	J
					SA-4-2(14-16)	2.47	mg/Kg	J
					SA-4-3(0.7-2.7)	3.96	mg/Kg	J
					SA-4-3(14-16)	3.94	mg/Kg	J
Dup10(042805)	6.14	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Vanadium	SA-4-3(0.7-2.7)	12	<10	Dup11(042805)	10.3	mg/Kg	J
					Dup12(042805)	4.00	mg/Kg	J
					SA-13-1(14-16)	4.36	mg/Kg	J
					SA-7-5(0.7-2.7)	3.04	mg/Kg	J
Metals	Zinc	SA-1-1(1.1-3.1)	29	<10	SA-1-1(1.1-3.1)	7.8	mg/Kg	J
					SA-1-5(1-3)	7.5	mg/Kg	J
					SA-1-5(10-12)	14.3	mg/Kg	J
					SA-1-6(1-3)	8.7	mg/Kg	J
					SA-1-6(6-8)	9.5	mg/Kg	J
					SA-1-7(1-3)	8.6	mg/Kg	J
					SA-1-7(10-12)	8.8	mg/Kg	J
					SA-17-2(1-3)	8.2	mg/Kg	J
					SA-17-2(14-16)	14.7	mg/Kg	J
					SA-13-3(14-16)	8.4	mg/Kg	J
					SA-7-1(14-16)	15.4	mg/Kg	J
					SA-8-4(14-16)	11.7	mg/Kg	J
					SA-9-1(0.8-2.8)	8.2	mg/Kg	J
					SA-9-5(0.75-2.75)	13.4	mg/Kg	J
Dup5(042205)	9.7	mg/Kg	J					
Metals	Zinc	SA-9-1(14-16)	24	<10	SA-1-1(8-10)	4.5	mg/Kg	J
					SA-2-1(14-16)	4.5	mg/Kg	J
					SA-17-1(1-3)	3.7	mg/Kg	J
					SA-17-1(14-16)	4.5	mg/Kg	J
					SA-17-3(0.8-2.8)	3.9	mg/Kg	J
					SA-17-4(0.75-2.75)	4.1	mg/Kg	J
					Dup1(041905)	3.4	mg/Kg	J
					SA-19-1(0.6-2.6)	3.3	mg/Kg	J
SA-19-2(0.5-2.5)	3.8	mg/Kg	J					

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Zinc	SA-9-1(14-16)	24	<10	SA-7-4(0.7-2.7)	3.1	mg/Kg	J
					SA-9-2(14-16)	4.9	mg/Kg	J
					SA-8-3(14-16)	6.3	mg/Kg	J
					SA-9-1(14-16)	5.5	mg/Kg	J
					SA-9-3(0.6-2.6)	3.3	mg/Kg	J
					SA-9-3(14-16)	5.0	mg/Kg	J
					SA-3-1(0.75-2.75)	3.6	mg/Kg	J
					SA-3-1(14-16)	4.7	mg/Kg	J
					SA-9-4(0.75-2.75)	4.8	mg/Kg	J
					Dup4(042105)	4.0	mg/Kg	J
					SA-10-1(0.8-2.8)	3.2	mg/Kg	J
					SA-10-1(14-16)	5.0	mg/Kg	J
					SA-10-2(0.7-2.7)	3.7	mg/Kg	J
					SA-10-2(14-16)	6.9	mg/Kg	J
					SA-11-1(0.75-2.75)	5.8	mg/Kg	J
SA-9-7(0.6-2.6)	3.4	mg/Kg	J					
Metals	Zinc	SA-12-2(0.7-2.7)	12	<10	SA-12-2(0.7-2.7)	4.9	mg/Kg	J
					SA-12-2(11.5-13.5)	5.2	mg/Kg	J
					SA-7-3(0.8-2.8)	5.7	mg/Kg	J
					SA-15-1(0.7-2.7)	4.7	mg/Kg	J
					Dup6(042505)	4.4	mg/Kg	J
					SA-7-6(0.75-2.75)	3.9	mg/Kg	J
Metals	Zinc	SA-14-5(0.5-2.5)	37	<10	SA-8-2(0.75-2.75)	4.2	mg/Kg	J
					SA-8-1(0.7-2.7)	5.2	mg/Kg	J
					SA-8-1(14-16)	6.8	mg/Kg	J
					SA-6-2(0.7-2.7)	5.7	mg/Kg	J
					SA-6-3(14-16)	8.3	mg/Kg	J
					SA-7-2(14-16)	8.6	mg/Kg	J

**TABLE 12**  
**QUALIFIED SAMPLE DATA DUE TO OUTLYING ICP SERIAL DILUTION RESULTS**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Parameter</i>	<i>Analyte</i>	<i>Serial Dilution Sample ID</i>	<i>%D</i>	<i>Control Limit (percent)</i>	<i>Associated Sample I.D.</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Metals	Zinc	SA-14-5(0.5-2.5)	37	<10	SA-18-2(14-16)	6.6	mg/Kg	J
					SA-14-3(14-16)	8.4	mg/Kg	J
					SA-14-4(0.7-2.7)	8.3	mg/Kg	J
					SA-14-5(0.5-2.5)	5.8	mg/Kg	J
Metals	Zinc	SA-4-3(0.7-2.7)	28	<10	SA-5-2(0.7-2.7)	12.1	mg/Kg	J
					SA-5-2(14-16)	13.8	mg/Kg	J
					SA-4-1(14-16)	10.1	mg/Kg	J
					SA-4-2(0.9-2.9)	6.8	mg/Kg	J
					SA-4-2(14-16)	6.9	mg/Kg	J
					SA-4-3(0.7-2.7)	8.9	mg/Kg	J
					SA-4-3(14-16)	10.7	mg/Kg	J
					Dup10(042805)	13.7	mg/Kg	J
					Dup12(042805)	8.8	mg/Kg	J
					SA-13-1(14-16)	12.2	mg/Kg	J
SA-7-5(0.7-2.7)	7.4	mg/Kg	J					

## Notes:

%D    Percent Difference.

J       Estimated.

**TABLE 13**  
**QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANK**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
**APRIL 2005**

<i>Parameter</i>	<i>Blank Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Associated Sample ID</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Units</i>
VOC	TB(042605)	Toluene	10J	SA-12-2(0.7-2.7)	20 J	50 U	µg/kg
				SA-13-1(0.75-2.75)	30 J	50 U	µg/kg
				SA-7-3(0.8-2.8)	20 J	60 U	µg/kg
				SA-7-5(14-16)	10 J	50 U	µg/kg
				Dup6(042505)	30 J	50 U	µg/kg
				Dup6(042505)	30 J	50 U	µg/kg
VOC	TB-(042805)	Toluene	30J	SA-1-1(8-10)	10 J	50 U	µg/kg
				Dup11(042805)	21	21 U	µg/kg
		m&p-Xylene	20J				

Notes:

- J Estimated.
- U Non-detect at associated value.
- VOC Volatile Organic Compounds.

**TABLE 14**  
**QUALIFICATION OF SAMPLE DATA RESULTING**  
**CALIBRATION RANGE EXCEEDANCE**  
**LCA SOUTH ASSEMBLY SITE ASSESSMENT - SUBSURFACE INVESTIGATION SAMPLING**  
**GENERAL MOTORS CORPORATION**  
**LANSING, MICHIGAN**  
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<i>Sample Delivery Group</i>	<i>Analysis</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>Analysis Date</i>	<i>Result</i>	<i>Qualifier</i>
22006	SVOC	SA-13-1(14-16)	Naphthalene	05/11/05	27400	J
			2-Methylnaphthalene	05/11/05	32400	J

Notes:

J Estimated.

SVOC Semi-Volatile Organic Compound.



## MEMORANDUM

TO: Amy Hoeksema REF. NO.: 17307-088008

FROM: Chris Hollingsworth/jbh/8 DATE: January 19, 2006  
E-Mail and U.S. Mail

RE: **Data Quality Assessment and Validation  
Lansing Plants 1 & 2 - LCA Addendum 1 Site Investigation  
General Motors  
Lansing, Michigan**

The following details a quality assessment and validation of the analytical data resulting from the collection of 86 soil samples and one waste characterization sample (excluding quality control [QC] samples) from the General Motors - Lansing Plants 1 & 2 Site (Site) in Lansing, Michigan, from November 1 to November 18, 2005. The sample summary detailing sample identification, sample location, QC samples, and analytical parameters is presented in Table 1. Sample analysis was completed at Merit Laboratories, Inc., in East Lansing, Michigan (Merit), in accordance with the methodologies presented in Table 2. The QC criteria used to assess the data were established by the methods and following documents:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999;
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994; and
- iii) "Innovative Approaches to Data Validation", USEPA Region III, June 1995.

Full Contract Laboratory Program (CLP)-equivalent raw data deliverables were provided by the laboratory for approximately 10 percent of the data. The data quality assessment and validation presented in the following subsections were performed based on the sample results and supporting quality assurance/quality control (QA/QC) provided.

For the remaining 90 percent (approximate) of the analytical data, a reduced validation (verification) was performed. The reduced validation of the data was based on information obtained from the Chain of Custody forms, finished report forms, blank data, duplicate data, and recovery data for matrix, laboratory control, surrogate spikes, and internal standards.

### Holding Time Period and Sample Analysis - Full and Reduced Validations

The holding time periods are presented in the analytical methods. All samples were properly cooled after collection and upon receipt at the laboratory. Most samples were prepared and analyzed within the method-required holding times and no qualification was required. However, samples collected for

ethylene glycol analyses exceeded the method required holding time and were qualified as estimated (see Table 3).

#### Gas Chromatography/Mass Spectrometer (GC/MS) Mass Calibration – Full Validation Only

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the volatile organic compound (VOC) and semi-volatile organic compound (SVOC) methods require the analysis of the specific tuning compounds bromofluorobenzene (BFB) and decafluorotriphenylphosphine (DFTPP), respectively. The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

Instrument tuning data were reviewed. Tuning compounds were analyzed at the required frequency throughout the VOC and SVOC analysis periods. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

#### Initial Calibration – Organic Analyses, GC/MS – Full Validation Only

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a minimum of a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range.

Calibration data were reviewed for all samples. Linearity of the calibration curve and instrument sensitivity were evaluated against the following criteria:

- i) all relative response factors (RRFs) must be greater than or equal to 0.05; and
- ii) percent relative standard deviation (%RSD) values must not exceed 30 percent or if quadratic/linear regression is used, the correlation coefficient ( $R^2$ ) value must be at least 0.995/0.990, respectively.

Initial calibration standards were analyzed as required and all data showed acceptable sensitivity and linearity for VOCs. For SVOCs most data showed acceptable sensitivity and linearity; however, the following compounds had %RSDs above 30: pyrene; indeno(1,2,3-c,d)pyrene; dibenzo(a,h)anthracene; and benzo(g,h,i)perylene. All associated data were qualified as estimated (see Table 4).

#### Initial Calibration - Organics, GC – Full Validation Only

To quantify compounds of interest, calibration of the GC over a specific concentration range must be performed. The initial calibration for polychlorinated biphenyls (PCBs) requires only three Aroclors be calibrated using multiple points. A minimum of a five-point calibration curve is analyzed for Aroclors 1264, 1016, and 1260, while the remaining Aroclors are calibrated using a single point. Linearity of the calibration curves are acceptable if %RSD values are less than or equal to 20 percent or if the correlation coefficient is greater than 0.995. Retention time windows are also calculated from the initial calibration analyses. These windows are then used to identify all compounds of interest in subsequent analyses.

Initial calibration standards were analyzed at the required frequencies. All retention time and linearity criteria were satisfied.

Inductively Coupled Plasma/Mass Spectrometer (ICP/MS) -  
Mass Calibration and Resolution Checks - Metal Analyses - Full Validation Only

To ensure adequate mass resolution, identification, and to some degree, sensitivity; the performance of each ICP/MS instrument used for metals analyses was checked prior to calibration before initiating an analysis sequence through the analysis of a tuning solution. The results of the tuning solution analysis were reviewed against the following criteria:

- i) analyze tuning solution a minimum of four times with a %RSD of less than or equal to five for the analytes contained in the tuning solution; and
- ii) the mass resolution must be within 0.1 atomic mass unit (amu) of the true value over the analytical range.

Instrument performance check data were reviewed. The tuning solution was analyzed at the required frequency throughout the analyses. The results of all instrument performance checks were within the acceptance criteria indicating acceptable instrument performance.

Initial Calibration - Inorganic Analyses - Full Validation Only

Initial calibration of the instruments ensures that they are capable of producing satisfactory quantitative data at the beginning of a series of analyses. For ICP and ICP/MS analyses, a calibration blank, and at least one standard must be analyzed at each wavelength to establish the analytical curve. For cold vapor atomic absorption (CVAA) and instrumental wet chemistry analyses, a calibration blank and a minimum of four standards must be analyzed to establish the analytical curve. Resulting correlation coefficients for curves consisting of a blank and four or more standards must be at least 0.995.

After the analyses of the calibration curves, an initial calibration verification (ICV) standard must be analyzed to verify the analytical accuracy of the calibration curves. All analyte recoveries from the analyses of the ICVs must be within the following control limits:

<i>Analytical Method</i>	<i>Inorganic Species</i>	<i>Control Limits (Percent)</i>
ICP and ICP/MS	Metals	90 - 110
CVAA	Mercury	90 - 110
Instrumental Wet Chemistry	Cyanide	90 - 110

Upon review of the data, it was determined that all inorganic calibration curves and ICVs were analyzed at the proper frequencies and that all of the above-specified criteria were met. The laboratory effectively demonstrated that instrumentation used for these analyses was properly calibrated prior to sample analyses.

Continuing Calibration - Organics, GC/MS - Full Validation Only

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

- i) all RRF values must be greater than or equal to 0.05; and
- ii) percent difference (%D) values must not exceed 25 percent.

Continuing calibration standards were analyzed as required and all data showed acceptable sensitivity and linearity for VOCs and most SVOCs and no qualification was required. One continuing calibration standard showed a %D value for that exceeded the acceptance criteria for the SVOC compound atrazine. All data associated with this continuing calibration standard were qualified as estimated (see Table 5).

#### Continuing Calibration - Organics, GC - Full Validation Only

To ensure that the calibration of the instrument is valid throughout the sample analysis period, continuing calibration standards are analyzed and evaluated on a regular basis. To evaluate the continued linearity of the calibration, %D values are calculated for each compound in all continuing standards and assessed against an acceptance criterion of 15 percent.

To ensure that compound retention times do not vary over the analysis period, all retention times must fall within the established retention time windows.

Continuing calibration standards were analyzed at the required frequency and all method criteria were met for analyte linearity.

#### Continuing Calibration - Inorganics - Full Validation Only

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. All analyte recoveries reported for the CCVs were within the specified limits.

#### Method Blank Samples - Full and Reduced Validations

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of sample contamination introduced during analysis. Laboratory blanks are prepared from de-ionized water and analyzed as samples.

For this study, method blanks were analyzed at a minimum frequency of one per analytical batch.

In accordance with the "Guidelines", all sample results greater than the method detection limit (MDL) but less than five times the amount detected in the associated blank were qualified as non-detect. The blank results were non-detect for the analytes of interest with the exception of metals, VOCs, and SVOCs. All associated results for metals, VOCs, and SVOCs were qualified as non-detect (see Table 6). Investigative samples associated with contaminated laboratory blanks that yielded either non-detect concentrations or

concentrations greater than five times the associated laboratory blank concentrations for the analytes of interest required no qualification.

#### Surrogate Compound Percent Recoveries – Organics – Full and Reduced Validations

In accordance with the methods employed, all samples, blanks, and standards analyzed for VOCs, SVOCs, PCBs, and ethylene glycol were spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency and are assessed against method control limits. For the SVOC method, it is acceptable for one surrogate recovery per fraction (base neutral or acid phenolic) to fall outside of these limits, provided it is greater than 10 percent.

All surrogate recoveries were within the laboratory specified control limits demonstrating acceptable analytical accuracy and no qualification was required.

#### Internal Standard (IS) Summaries – Organics – Full and Reduced Validations

To correct for changes in GC/MS response and sensitivity, IS compounds are added to investigative samples and QC samples prior to VOC and SVOC analyses. All results are calculated as a ratio of the IS response. The criteria by which the IS results are assessed are as follows:

- i) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard; and
- ii) the retention time of the IS must not vary more than  $\pm 30$  seconds from the associated calibration standard.

All sample IS results met the above criteria and all were correctly used to calculate sample results.

#### Laboratory Control Sample (LCS) Analysis – Full and Reduced Validations

The LCS serves as a measure of overall analytical performance. LCSs are prepared with all analytes of interest and analyzed with each sample batch.

LCSs were prepared and analyzed for all parameters. The LCS recoveries were within the laboratory specified control limits for all analytes of interest with the exception of some VOC and SVOC recoveries. For VOCs, the compound acetone demonstrated a recovery of <10 percent and all associated acetone results were qualified as reject. All remaining VOC and SVOC results associated with non-compliant LCS recoveries were qualified as estimated (see Table 7).

#### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses – Full and Reduced Validations

MS/MSD samples are prepared for each parameter and analyzed with each sample batch for the organic parameters. MS/MSD samples are prepared and analyzed with the samples for each metal and inorganic analyte. The recoveries of spike analyses are used to assess the analytical accuracy achieved on individual sample matrices. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as shown in Table 1. The laboratory performed additional analyses internally. Most MS/MSD recoveries were within laboratory control limits demonstrating acceptable overall analytical accuracy and precision. For VOCs and SVOCs, MS/MSDs demonstrated recoveries or RPDs that were outside laboratory control limits for several compounds. The parent samples associated with the non-compliant MS/MSDs were qualified as estimated (see Table 8). No qualification was performed when only the MS or MSD was slightly outside of control limits.

#### Field Duplicate Sample Analyses – Full and Reduced Validations

Analytical precision is also evaluated based on the analysis of duplicate samples. The samples selected for duplicate analyses are identified in Table 1. The laboratory performed additional analyses internally. All duplicate analyses performed were acceptable, demonstrating good analytical precision.

#### Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Analysis – Full Validation Only

To verify that the laboratory has established proper inter-element and background correction factors, ICSs are analyzed. These samples contain high concentrations of aluminum, calcium, magnesium, and iron and are analyzed at the beginning and end of each sample analysis period.

ICS analysis results were evaluated for all samples. All ICS recoveries were within the established control limits of 80 to 120 percent.

#### Serial Dilution – ICP/MS Analyses – Full Validation Only

The serial dilution determines whether significant physical or chemical interferences exist due to sample matrix. A minimum of one per 20 investigative samples is analyzed at a five-fold dilution. For samples with sufficient analyte concentrations, the serial dilution results must agree within 10 percent of the original results.

Serial dilution analyses were performed and the results were acceptable.

#### Target Compound Identification – Full Validation Only

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra (if applicable) were evaluated according to identification criteria established by the methods. The samples identified in Table 1 were reviewed. The organics reported adhered to the specified identification criteria.

#### Trip Blanks – VOCs – Full and Reduced Validations

Trip blanks are transported, stored, and analyzed with the investigative samples to identify potential cross-contamination of VOCs. Trip blanks were collected at the proper frequency, and most results were non-detect for the analytes of interest. In accordance with the "Guidelines", all sample results greater than the MDL but less than five times the amount detected in the associated blank were qualified as non-detect. All associated results for VOCs were qualified as non-detect (see Table 9). Investigative samples associated with contaminated trip blanks that yielded either non-detect concentrations or concentrations greater than five times the associated trip blank concentrations for the analytes of interest required no qualification.

Calibration Range Exceedances- *Full and Reduced Validations*

For all analytes (organic and inorganic), instrument-determined values must be within the calibrated range of analytes demonstrated during the initial calibration of the instrument. All analytes were within this calibration range.

System Performance - *Full Validation Only*

System performance between various QC checks was evaluated to monitor for changes that may have caused the degradation of data quality. The samples identified in Table 1 were reviewed. No technical problems or chromatographic anomalies were observed which require qualification of the data.

Overall Assessment

Based on the assessment detailed in the foregoing, the data produced by Merit were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used as reported with the specific qualifications noted within.

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

Sample ID	Location ID	Start Depth (ft bgs)	End Depth (ft bgs)	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments							
						VOCs	TCLP VOCs	Reactivity, Corrosivity, Ignitability	TCLP RCRA Metals	TCLP SVOCs	SVOCs	Site PAL Metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Se, Ag, Tl, V, Zn)	PCBs	Cyanide	Ethylene Glycol								
SA 32-4 (8-10)	SA 32-4	8	10	11/01/05	9:06																		
SA 32-3 (8-10)	SA 32-3	8	10	11/01/05	9:24																		
SA 32-1 (8-10)	SA 32-1	8	10	11/01/05	9:53																		
SA 32-2 (8-10)	SA 32-2	8	10	11/01/05	10:04																		
SA23-2 (14-16)	SA 23-2	14	16	11/02/05	11:25																		
SA48-4 (8-10)	SA 48-4	8	10	11/02/05	9:37																		
SA23-1 (14-16)	SA 23-1	14	16	11/02/05	10:32																		
Dup 1	SA 23-2	14	16	11/02/05	11:25																		Duplicate of SA 23-2 (14-16)
SA48-3 (8-10)	SA 48-3	8	10	11/02/05	9:56																		
SA23-7 (4-6)	SA 23-7	4	6	11/02/05	14:44	X																	
SA23-8 (14-16)	SA 23-8	14	16	11/02/05	15:42																		
SA48-1 (8-10)	SA 48-1	8	10	11/03/05	8:57																		
SA48-2 (8-10)	SA 48-2	8	10	11/03/05	9:28																		
SA26-14 (14-16)	SA 26-14	14	16	11/03/05	10:01																		
SA26-13 (14-16)	SA 26-13	14	16	11/03/05	10:44																		
SA26-5 (14-16)	SA 26-5	14	16	11/03/05	11:25																		
SA26-3 (14-16)	SA 26-3	14	16	11/03/05	11:55																		
SA26-12 (14-16)	SA 26-12	14	16	11/03/05	13:40																		
SA26-8 (14-16)	SA 26-8	14	16	11/03/05	14:25																		
SA 26-9 (14-16)	SA 26-9	14	16	11/04/05	10:35																		
SA 26-10 (14-16)-MSD	SA 26-10	14	16	11/04/05	10:59																		MS/MSD
SA 26-10 (14-16)	SA 26-10	14	16	11/04/05	10:59																		
DUP 2	SA 26-10	14	16	11/04/05																			Duplicate of SA 26-10 (14-16)
SA 26-11 (14-16)	SA 26-11	14	16	11/04/05	12:55																		
SA 26-7 (14-16)	SA 26-7	14	16	11/04/05	13:20																		
SA 52-1 (8-10)	SA 52-1	8	10	11/07/05	11:02																		
SA 35-7 (8-10)	SA 35-7	8	10	11/07/05	15:01																		
DUP 3	SA 35-7	8	10	11/07/05																			Duplicate of SA 35-7 (8-10)

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

Sample ID	Location ID	Start Depth (ft bgs)	End Depth (ft bgs)	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments
						VOCs	TCLP VOCs	Reactivity, Corrosivity, Ignitability	TCLP RCRA Metals	TCLP SVOCs	SVOCs	Site PAL Metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Se, Ag, Tl, V, Zn)	PCBs	Cyanide	Ethylene Glycol	
SA 35-1 (8-10)	SA 35-1	8	10	11/08/05	9:42								X		X	
SA 35-2 (8-10)	SA 35-2	8	10	11/08/05	9:07								X		X	
SA 47-3 (8-10)	SA 47-3	8	10	11/08/05	11:15								X		X	
SA 47-1 (8-10)	SA 47-1	8	10	11/08/05	11:36								X		X	
SA 47-2 (8-10)	SA 47-2	8	10	11/08/05	15:10								X		X	
SA 20-1 (8-10)	SA 20-1	8	10	11/08/05	14:35	X							X		X	
SA 20-2 (0-2)	SA 20-2	0	2	11/08/05	13:56		X						X		X	
SA 20-3 (2-4)	SA 20-3	2	4	11/08/05	13:32	X							X		X	
SA 20-4 (6-8)	SA 20-4	6	8	11/08/05	12:25	X							X		X	
DUP 4	SA 20-4	6	8	11/08/05		X										Duplicate of SA 20-4 (6-8)
TRIP BLANK #		-	-	11/08/05	13:00	X										
TB2		-	-	11/09/05	9:30	X										
SA 44-6 (0-2)	SA 44-6	0	2	11/09/05	10:56	X							X		X	
SA 56-1 (2-4)	SA 56-1	2	4	11/09/05	15:12	X							X		X	
SA 42-1 (0-2)	SA 42-1	0	2	11/09/05	8:21	X							X		X	
SA 44-5 (12-14)	SA 44-5	12	14	11/09/05	11:29	X							X		X	
SA 56-9 (0-2)	SA 56-9	0	2	11/09/05	14:32	X							X		X	
SA 56-3 (14-16)	SA 56-3	14	16	11/10/05	9:15								X		X	
SA 56-4 (8-10)	SA 56-4	8	10	11/10/05	9:57	X							X		X	
SA 56-7 (8-10)	SA 56-7	8	10	11/10/05	10:40	X							X		X	
SA 41-1 (6-8)	SA 41-1	6	8	11/10/05	12:30	X							X		X	
SA 57-1 (4-5)	SA 57-1	4	5	11/10/05	14:06								X		X	
SA 59-3 (8-10)	SA 59-3	8	10	11/10/05	14:37	X							X		X	
SA 59-1 (8-10)	SA 59-1	8	10	11/10/05	14:54	X							X		X	
TB3	Trip Blank	-	-	11/10/05	10:28	X										
SA 45-4 (8-10)	SA 45-4	8	10	11/11/05	8:50	X							X		X	
TB4	Trip Blank	-	-	11/11/05	9:00	X										
SA 45-3 (8-10)	SA 45-3	8	10	11/11/05	9:09	X							X		X	

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

Sample ID	Location ID	Start Depth (ft bgs)	End Depth (ft bgs)	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters										Comments		
						VOCs	TCLP VOCs	Reactivity, Corrosivity, Ignitability	TCLP RCRA Metals	TCLP SVOCs	SVOCs	Site P,AL Metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Se, Ag, Tl, V, Zn)	PCBs	Cyanide	Ethylene Glycol			
SA 45-1 (8-10)	SA 45-1	8	10	11/11/05	9:46	X					X	X						
SA 62-7 (6-8)	SA 62-7	6	8	11/11/05	11:52	X						X						
SA 62-9 (14-16)	SA 62-9	14	16	11/11/05	12:12	X						X						
DUP5	SA 62-9	14	16	11/11/05		X						X						Duplicate of SA 62-9 (14-16)
SA 62-5 (14-16)	SA 62-5	14	16	11/11/05	13:27						X	X	X					
SA 62-5 (4-6)	SA 62-5	4	6	11/11/05	13:19	X						X						
SA 62-4 (10-12)	SA 62-4	10	12	11/14/05	8:52	X						X						
SA 62-3 (10-12)	SA 62-3	10	12	11/14/05	9:34	X					X	X						
SA 62-3 (14-16)	SA 62-3	14	16	11/14/05	9:39						X	X	X					
TB5	Trip Blank	-	-	11/14/05	9:50	X												
SA 62-1 (4-6)	SA 62-1	4	6	11/14/05	11:21	X						X						
SA 62-18 (8-10)	SA 62-18	8	10	11/14/05	12:04	X						X						
SA 62-15 (6-8)	SA 62-15	6	8	11/14/05	11:59	X						X						
SA 62-14 (2-4)	SA 62-14	2	4	11/14/05	14:05	X						X						
SA 62-12 (8-10)	SA 62-12	8	10	11/15/05	9:10	X					X	X	X					
SA 62-11 (6-8)	SA 62-11	6	8	11/15/05	10:00	X						X						
DUP6		10	12	11/15/05		X						X						Duplicate of SA 21-1 (10-12)
SA 21-1 (10-12)	SA 21-1	10	12	11/15/05	13:00	X						X						
SA 21-4 (4-6)	SA 21-4	4	6	11/15/05	14:30	X						X						MS/MSD
TB-111505	Trip Blank	-	-	11/15/05		X												
SA21-8 (8-10)	SA 21-8	8	10	11/16/05	8:58							X						
SA21-10 (8-10)	SA 21-10	8	10	11/16/05	9:55							X						
SA67-9 (6-8)	SA 67-9	6	8	11/16/05	12:49	X						X						
TB-19	Trip Blank	-	-	11/16/05	13:00	X												
SA21-14 (8-10)	SA 21-14	8	10	11/16/05	9:15							X						
SA50-1 (3-5)	SA 50-1	3	5	11/16/05	9:45	X						X						
SA56-6 (8-10)	SA 56-6	8	10	11/16/05	10:25							X						
DUP7	SA 26-2	14	16	11/17/05								X						Duplicate of SA 26-2 (14-16)



**TABLE 2**  
**SUMMARY OF ANALYTICAL METHODOLOGIES**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Method</i>
TCL Volatile Organic Compounds (VOCs)	SW-846 8260 <sup>1</sup>
Ethylene Glycol	SW-846 8015 <sup>1</sup>
TCL Semi-Volatile Organic Compounds (SVOCs)	SW-846 8270 <sup>1</sup>
SSPL Metals	SW-846 6020/7471 <sup>1</sup>
Cyanide	SW-846 9010B <sup>1</sup>
PolyChlorinated Biphenyls (PCBs)	SW-846 8082 <sup>1</sup>
Coarse & Fractional Lead	SW-846 6020 <sup>1</sup>
TCLP Volatile Organic Compounds (VOCs)	SW-846 1311/8260 <sup>1</sup>
TCLP Semi-Volatile Organic Compounds (SVOCs)	SW-846 1311/8270 <sup>1</sup>
TCLP Metals	SW-846 1311/6010/7470/7471 <sup>1</sup>
Reactivity, Corrosivity, Ignitability (RCI)	SW-846 Chapter 7 <sup>1</sup>

Notes:

- <sup>1</sup> "Test Methods for Solid Waste Physical/Chemical Methods", SW-846, 3rd Edition, September 1986 (with subsequent revisions).
- <sup>2</sup> Multi-Media, Multi-Concentration, Inorganic Analysis, (ILM05.3), March 2004. Referenced from "Methods for the Chemical Analysis of Water and Wastes", (MCAWW), EPA-600/4-79-020, March 1983 and subsequent revisions.
- TAL Target Analyte List.
- TCL Target Compound List.
- SSPL Site Specific Parameter List
- TCLP Toxicity Characteristic Leaching Procedure

**TABLE 3**  
**QUALIFIED SAMPLE RESULTS DUE TO HOLDING TIME EXCEEDANCES**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Sample ID</i>	<i>Holding Time (days)</i>	<i>Holding Time Criteria (days)</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
Ethylene Glycol	SA32-1 (8-10)	27	14	10000 U	µg/kg	UJ
	SA32-2 (8-10)			10000 U	µg/kg	UJ
	SA32-3 (8-10)			11000 U	µg/kg	UJ
	SA32-4 (8-10)			11000 U	µg/kg	UJ
Ethylene Glycol	Dup3	21	14	11000 U	µg/kg	UJ
	SA35-7 (8-10)			11000 U	µg/kg	UJ

Notes:

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

**TABLE 4**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Calibration Date</i>	<i>% RSD</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	Pyrene	10/19/05	34.65	SA62-3 (10-12)	330 U	µg/kg	UJ
				SA62-3 (14-16)	1660	µg/kg	J
SVOC	Indeno(1,2,3-cd)pyrene	10/19/05	43.43	SA62-3 (10-12)	330 U	µg/kg	UJ
				SA62-3 (14-16)	330 U	µg/kg	UJ
SVOC	Dibenz(a,h)anthracene	10/19/05	42.01	SA62-3 (10-12)	330 U	µg/kg	UJ
				SA62-3 (14-16)	330 U	µg/kg	UJ
SVOC	Benzo(g,h,i)perylene	10/19/05	38.43	SA62-3 (10-12)	330 U	µg/kg	UJ
				SA62-3 (14-16)	330 U	µg/kg	UJ

Notes:

%RSD Percent Relative Standard Deviation.

J Estimated.

SVOC Semi-Volatile Organic Compound.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

**TABLE 5**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	11/15/05	Atrazine	30.5	SA62-3 (10-12)	330 U	µg/kg	UJ
				SA62-3 (14-16)	330 U	µg/kg	UJ

Notes:

%D Percent Difference.

SVOC Semi-Volatile Organic Compound.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

**TABLE 6**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE LABORATORY BLANKS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Sample Result</i>	<i>Qualified Result</i>	<i>Units</i>
VOC	11/22/05	Toluene	28	SA62-1 (4-6)	20 J	50 U	µg/Kg
				SA62-14 (2-4)	70	70 U	µg/Kg
				SA62-15 (6-8)	20 J	50 U	µg/Kg
				SA62-18 (8-10)	50 J	50 U	µg/Kg
				SA62-3 (10-12)	30 J	50 U	µg/Kg
				SA62-4 (10-12)	20 J	50 U	µg/Kg
VOC	11/22/05	Toluene	28	Dup6	30 J	50 U	µg/Kg
				SA21-1 (10-12)	20 J	50 U	µg/Kg
				SA21-4 (4-6)	30 J	60 U	µg/Kg
				SA62-11 (6-8)	20 J	50 U	µg/Kg
				SA62-12 (8-10)	30 J	50 U	µg/Kg
				TB-111505	30 J	50 U	µg/Kg
VOC	11/24/05	2-Butanone (Methyl Ethyl Ketone)	222	Dup 5	200 J	800 U	µg/Kg
				SA45-3 (8-10)	200 J	800 U	µg/Kg
				SA45-4 (8-10)	200 J	800 U	µg/Kg
				SA62-5 (4-6)	200 J	800 U	µg/Kg
				SA62-7 (6-8)	200 J	800 U	µg/Kg
				SA62-9 (14-16)	100 J	800 U	µg/Kg
VOC	11/24/05	Toluene	17.5	Dup 5	10 J	50 U	µg/Kg
				SA45-1 (8-10)	20 J	60 U	µg/Kg
				SA45-3 (8-10)	20 J	50 U	µg/Kg
				SA45-4 (8-10)	20 J	50 U	µg/Kg
				SA62-5 (4-6)	10 J	60 U	µg/Kg
				SA62-7 (6-8)	20 J	50 U	µg/Kg
				SA62-9 (14-16)	10 J	50 U	µg/Kg
				TB4	10 J	50 U	µg/Kg
VOC	11/29/05	2-Butanone (Methyl Ethyl Ketone)	239	SA67-9 (6-8)	200 J	800 U	µg/Kg
VOC	11/29/05	Toluene	26	SA50-1 (3-5)	30 J	50 U	µg/Kg
				SA67-9 (6-8)	20 J	50 U	µg/Kg
				TB-19	20 J	50 U	µg/Kg
SVOC	11/15/05	Biphenyl	24	SA62-3 (14-16)	200 J	330 U	µg/Kg
SVOC	11/15/05	Di-n-butylphthalate	37.3	SA62-3 (10-12)	20 J	330 U	µg/Kg
SVOC	11/15/05	bis(2-Ethylhexyl)phthalate	34.7	SA62-3 (10-12)	40 J	330 U	µg/Kg
				SA62-3 (14-16)	200 J	330 U	µg/Kg
SVOC	11/28/05	Biphenyl	24	SA45-1 (8-10)	30 J	330 U	µg/Kg
				SA62-5 (14-16)	200 J	330 U	µg/Kg
SVOC	11/28/05	Di-n-butylphthalate	37.3	SA45-1 (8-10)	30 J	330 U	µg/Kg
SVOC	11/28/05	Di-n-butylphthalate	34.7	SA62-12 (8-10)	30 J	330 U	µg/Kg
SVOC	11/28/05	Benzo(a)pyrene	37.3	SA62-12 (8-10)	30 J	330 U	µg/Kg

**TABLE 6**  
**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE LABORATORY BLANKS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Sample Result</i>	<i>Qualified Result</i>	<i>Units</i>
SVOC	11/28/05	Benzo(g,h,i)perylene	28	SA62-12 (8-10)	60 J	330 U	µg/Kg
SVOC	11/28/05	Dibenz(a,h)anthracene	26.7	SA62-12 (8-10)	50 J	330 U	µg/Kg
SVOC	11/28/05	bis(2-Ethylhexyl)phthalate	45.3	SA62-12 (8-10)	40 J	330 U	µg/Kg
SVOC	11/28/05	Indeno(1,2,3-cd)pyrene	32	SA62-12 (8-10)	60 J	330 U	µg/Kg
Metals	11/07/05	Selenium	0.11	SA32-4 (8-10)	0.46	0.46 U	mg/Kg
				SA32-1 (8-10)	0.43	0.43 U	mg/Kg
				SA32-2 (8-10)	0.43	0.43 U	mg/Kg
Metals	11/07/05	Selenium	0.27	SA32-3 (8-10)	0.65	0.65 U	mg/Kg
Metals	11/07/05	Silver	0.03	SA32-4 (8-10)	0.03 J	0.10 U	mg/Kg
				SA32-3 (8-10)	0.03 J	0.10 U	mg/Kg
				SA32-1 (8-10)	0.02 J	0.10 U	mg/Kg
Metals	11/07/05	Thallium	0.05	SA32-4 (8-10)	0.14 J	0.50 U	mg/Kg
				SA32-3 (8-10)	0.12 J	0.50 U	mg/Kg
				SA32-1 (8-10)	0.06 J	0.50 U	mg/Kg
				SA32-2 (8-10)	0.06 J	0.50 U	mg/Kg
Metals	11/21/05	Arsenic	0.05	SA62-4 (10-12)	0.21	0.21 U	mg/Kg
				SA62-15 (6-8)	0.12	0.12 U	mg/Kg
Metals	11/21/05	Selenium	0.16	SA62-4 (10-12)	0.27	0.27 U	mg/Kg
				SA62-3 (10-12)	0.24	0.24 U	mg/Kg
				SA62-3 (14-16)	0.76	0.76 U	mg/Kg
				SA62-1 (4-6)	0.14 J	0.20 U	mg/Kg
				SA62-18 (8-10)	0.41	0.41 U	mg/Kg
Metals	11/21/05	Silver	0.02	SA62-3 (14-16)	0.02 J	0.10 U	mg/Kg
				SA62-18 (8-10)	0.07 J	0.10 U	mg/Kg
				SA62-14 (2-4)	0.07 J	0.10 U	mg/Kg
Metals	11/21/05	Thallium	0.04	SA62-4 (10-12)	0.02 J	0.50 U	mg/Kg
				SA62-3 (10-12)	0.02 J	0.50 U	mg/Kg
				SA62-3 (14-16)	0.07 J	0.50 U	mg/Kg
				SA62-1 (4-6)	0.03 J	0.50 U	mg/Kg
				SA62-18 (8-10)	0.18 J	0.50 U	mg/Kg

## Notes:

J Estimated.

SVOC Semi-Volatile Organic Compound.

U Non-detect at associated value.

VOC Volatile Organic Compound.

**TABLE 7**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Percent Recovery</i>	<i>Control Limits (percent)</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	Acetone	8.3	13.2-200.8	SA62-1 (4-6)	80 U	µg/Kg	R
				SA62-14 (2-4)	80 U	µg/Kg	R
				SA62-15 (6-8)	80 U	µg/Kg	R
				SA62-18 (8-10)	80 U	µg/Kg	R
				SA62-3 (10-12)	80 U	µg/Kg	R
				SA62-4 (10-12)	80 U	µg/Kg	R
VOC	Carbon disulfide	40.1	43.3-120	SA62-1 (4-6)	300 U	µg/Kg	UJ
				SA62-14 (2-4)	300 U	µg/Kg	UJ
				SA62-15 (6-8)	300 U	µg/Kg	UJ
				SA62-18 (8-10)	300 U	µg/Kg	UJ
				SA62-3 (10-12)	300 U	µg/Kg	UJ
				SA62-4 (10-12)	300 U	µg/Kg	UJ
VOC	Methyl acetate	63.6	67.7-136.9	SA62-1 (4-6)	800 J	µg/Kg	J
				SA62-14 (2-4)	1000 J	µg/Kg	J
				SA62-15 (6-8)	3000 U	µg/Kg	UJ
				SA62-18 (8-10)	900 J	µg/Kg	J
				SA62-3 (10-12)	3000 U	µg/Kg	UJ
				SA62-4 (10-12)	3000 U	µg/Kg	UJ
VOC	1,1-Dichloroethene	55.6	59-172	SA62-1 (4-6)	50 U	µg/Kg	UJ
				SA62-14 (2-4)	50 U	µg/Kg	UJ
				SA62-15 (6-8)	50 U	µg/Kg	UJ
				SA62-18 (8-10)	50 U	µg/Kg	UJ
				SA62-3 (10-12)	50 U	µg/Kg	UJ
				SA62-4 (10-12)	50 U	µg/Kg	UJ
VOC	Trifluorotrchloroethane (Freon 113)	55.9	56.5-120	SA62-1 (4-6)	100 U	µg/Kg	UJ
				SA62-14 (2-4)	100 U	µg/Kg	UJ
				SA62-15 (6-8)	100 U	µg/Kg	UJ
				SA62-18 (8-10)	100 U	µg/Kg	UJ
				SA62-3 (10-12)	100 U	µg/Kg	UJ
				SA62-4 (10-12)	100 U	µg/Kg	UJ
VOC	Methyl acetate	61.5	67.7-136.9	Dup 5	3000 U	µg/Kg	UJ
				SA45-1 (8-10)	3000 U	µg/Kg	UJ
				SA45-3 (8-10)	3000 U	µg/Kg	UJ
				SA45-4 (8-10)	3000 U	µg/Kg	UJ
				SA62-5 (4-6)	300 J	µg/Kg	J
				SA62-7 (6-8)	3000 U	µg/Kg	UJ
				SA62-9 (14-16)	3000 U	µg/Kg	UJ
				TB4	3000 U	µg/Kg	UJ
VOC	1,1-Dichloroethene	57.4	59-172	Dup 5	50 U	µg/Kg	UJ
				SA45-1 (8-10)	60 U	µg/Kg	UJ
				SA45-3 (8-10)	50 U	µg/Kg	UJ
				SA45-4 (8-10)	50 U	µg/Kg	UJ
				SA62-5 (4-6)	60 U	µg/Kg	UJ
				SA62-7 (6-8)	50 U	µg/Kg	UJ
				SA62-9 (14-16)	50 U	µg/Kg	UJ
				TB4	50 U	µg/Kg	UJ

**TABLE 7**  
**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS**  
**LCA ADDENDUM 1 SITE INVESTIGATION**  
**GENERAL MOTORS - LANSING PLANTS 1 & 2**  
**LANSING, MICHIGAN**  
**NOVEMBER 2005**

<i>Parameter</i>	<i>Compound</i>	<i>Percent Recovery</i>	<i>Control Limits (percent)</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
VOC	Acetone	8.3	13.2-200.8	Dup6	800 U	µg/Kg	R
				SA21-1 (10-12)	800 U	µg/Kg	R
				SA21-4 (4-6)	800 U	µg/Kg	R
				SA62-11 (6-8)	800 U	µg/Kg	R
				SA62-12 (8-10)	800 U	µg/Kg	R
				TB-111505	800 U	µg/Kg	R
VOC	Carbon disulfide	40.1	43.3-120	Dup6	300 U	µg/Kg	UJ
				SA21-1 (10-12)	300 U	µg/Kg	UJ
				SA21-4 (4-6)	300 U	µg/Kg	UJ
				SA62-11 (6-8)	300 U	µg/Kg	UJ
				SA62-12 (8-10)	300 U	µg/Kg	UJ
				TB-111505	300 U	µg/Kg	UJ
VOC	Methyl acetate	63.6	67.7-136.9	Dup6	3000 U	µg/Kg	UJ
				SA21-1 (10-12)	3000 U	µg/Kg	UJ
				SA21-4 (4-6)	3000 U	µg/Kg	UJ
				SA62-11 (6-8)	3000 U	µg/Kg	UJ
				SA62-12 (8-10)	3000 U	µg/Kg	UJ
				TB-111505	3000 U	µg/Kg	UJ
VOC	1,1-Dichloroethene	55.6	59-172	Dup6	50 U	µg/Kg	UJ
				SA21-1 (10-12)	50 U	µg/Kg	UJ
				SA21-4 (4-6)	60 U	µg/Kg	UJ
				SA62-11 (6-8)	50 U	µg/Kg	UJ
				SA62-12 (8-10)	50 U	µg/Kg	UJ
				TB-111505	50 U	µg/Kg	UJ
VOC	Trifluorotrchloroethane (Freon 113)	55.9	56.5-120	Dup6	100 U	µg/Kg	UJ
				SA21-1 (10-12)	100 U	µg/Kg	UJ
				SA21-4 (4-6)	100 U	µg/Kg	UJ
				SA62-11 (6-8)	100 U	µg/Kg	UJ
				SA62-12 (8-10)	100 U	µg/Kg	UJ
				TB-111505	100 U	µg/Kg	UJ
VOC	Methyl acetate	61.5	67.7-136.9	SA50-1 (3-5)	3000 U	µg/Kg	UJ
				SA67-9 (6-8)	3000 U	µg/Kg	UJ
				TB-19	3000 U	µg/Kg	UJ
VOC	1,1-Dichloroethene	57.4	59-172	SA50-1 (3-5)	50 U	µg/Kg	UJ
				SA67-9 (6-8)	50 U	µg/Kg	UJ
				TB-19	50 U	µg/Kg	UJ
SVOC	N-Nitrosodiphenylamine	31.3	38.9-137.5	SA62-3 (10-12)	330 U	µg/Kg	UJ
				SA62-3 (14-16)	330 U	µg/Kg	UJ
SVOC	N-Nitrosodiphenylamine	31.3	38.9-137.5	SA45-1 (8-10)	330 U	µg/Kg	UJ
				SA62-5 (14-16)	330 U	µg/Kg	UJ

TABLE 7  
 QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS  
 LCA ADDENDUM 1 SITE INVESTIGATION  
 GENERAL MOTORS - LANSING PLANTS 1 & 2  
 LANSING, MICHIGAN  
 NOVEMBER 2005

<i>Parameter</i>	<i>Compound</i>	<i>Percent Recovery</i>	<i>Control Limits (percent)</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>	<i>Qualifier</i>
SVOC	N-Nitrosodiphenylamine	27.1	38.9-137.5	SA62-12 (8-10)	330 U	µg/Kg	UJ

## Notes:

J Estimated.

R Rejected.

SVOC Semi-Volatile Organic Compound.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

VOC Volatile Organic Compound.

TABLE 8  
 QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES  
 LCA ADDENDUM 1 SITE INVESTIGATION  
 GENERAL MOTORS - LANSING PLANTS 1 & 2  
 LANSING, MICHIGAN  
 NOVEMBER 2005

Parameter	Associated Sample ID	Analyte	MS	MSD	RPD	Control Limits		Sample Result	Units	Qualifier
			Recovery (percent)	Recovery (percent)		Recovery (percent)	RPD (percent)			
VOC	SA45-3 (8-10)	Acetone	26.8	33.3	21.7	13.2-200.8	20	800 U	µg/Kg	UJ
		Methyl acetate	61.2	76.1	21.7	67.7-136.9	20	3000 U	µg/Kg	UJ
		Trichlorofluoromethane (CFC-11)	27.1	26.3	3.2	33.7-120	20	100 U	µg/Kg	UJ
		Bromoform	80.6	98.7	20.2	38.1-120	20	50 U	µg/Kg	UJ
SVOC	SA62-3 (10-12)	N-Nitrosodiphenylamine	24.2	25.2	4	38.9-137.5	25	330 U	µg/Kg	UJ

Notes:

MS Matrix Spike.

MSD Matrix Spike Duplicate.

RPD Relative Percent Difference.

SVOC Semi-Volatile Organic Compound.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

VOC Volatile Organic Compound.

TABLE 9  
 QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANK  
 LCA ADDENDUM 1 SITE INVESTIGATION  
 GENERAL MOTORS - LANSING PLANTS 1 & 2  
 LANSING, MICHIGAN  
 NOVEMBER 2005

<i>Parameter</i>	<i>Blank Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Associated Sample ID</i>	<i>Sample Result</i>	<i>Qualified Sample Result</i>	<i>Units</i>
VOC	11/08/05	Toluene	10	Dup4 SA20-4 (6-8)	40 J	50 U	µg/Kg
					30 J	60 U	µg/Kg
VOC	11/09/05	Toluene	10	SA42-1 (0-2) SA44-6 (0-2) SA56-1 (2-4)	9 J	50 U	µg/Kg
					30 J	50 U	µg/Kg
					8 J	50 U	µg/Kg
VOC	11/10/05	Toluene	10	SA41-1 (6-8) SA56-4 (8-10) SA56-7 (8-10) SA59-3 (8-10)	9 J	50 U	µg/Kg
					20 J	60 U	µg/Kg
					10 J	50 U	µg/Kg
					8 J	50 U	µg/Kg
VOC	11/10/05	Methylene chloride	40	SA41-1 (6-8) SA56-7 (8-10) SA59-1 (8-10) SA59-3 (8-10)	30 J	300 U	µg/Kg
					30 J	300 U	µg/Kg
					30 J	300 U	µg/Kg
					30 J	300 U	µg/Kg
VOC	11/14/05	Methylene chloride	30	SA62-1 (4-6) SA62-14 (2-4) SA62-15 (6-8) SA62-18 (8-10)	20 J	300 U	µg/Kg
					20 J	300 U	µg/Kg
					20 J	300 U	µg/Kg
					30 J	300 U	µg/Kg
VOC	11/15/05	Toluene	30	Dup6 SA21-1 (10-12) SA21-4 (4-6) SA62-11 (6-8) SA62-12 (8-10)	30 J	50 U	µg/Kg
					20 J	50 U	µg/Kg
					30 J	60 U	µg/Kg
					20 J	50 U	µg/Kg
					30 J	50 U	µg/Kg
VOC	11/24/05	2-Butanone (Methyl Ethyl Ketone)	222	Dup 5 SA45-3 (8-10) SA45-4 (8-10) SA62-5 (4-6) SA62-7 (6-8) SA62-9 (14-16)	200 J	800 U	µg/Kg
					200 J	800 U	µg/Kg
					200 J	800 U	µg/Kg
					200 J	800 U	µg/Kg
					100 J	800 U	µg/Kg
VOC	11/24/05	Toluene	17.5	Dup 5 SA45-1 (8-10) SA45-3 (8-10) SA45-4 (8-10) SA62-5 (4-6) SA62-7 (6-8) SA62-9 (14-16)	10 J	50 U	µg/Kg
					20 J	60 U	µg/Kg
					20 J	50 U	µg/Kg
					20 J	50 U	µg/Kg
					10 J	60 U	µg/Kg
					20 J	50 U	µg/Kg

Notes:

- J Estimated.
- U Non-detect at associated value.
- VOC Volatile Organic Compound.