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MEMORANDUM

TO:	Kurt Blizzard/GM ENCORE	REF. NO.:	017360-10
FROM:	Jeni Quigley/jq/50/Lan. JQ	DATE:	September 8, 2006
C.C.:	Scott Murto/GM Gary Klepper/CRA		
RE:	**2005 Bulk Unload Area Investigation Summary** **General Motors Corporation Metal Fabrication Division** **Grand Rapids Metal Plant** **Wyoming, Michigan**		

This memorandum presents a summary of the subsurface investigation conducted by Conestoga-Rovers & Associates, Inc. (CRA) at the new bulk unload area in the vicinity of the new and used oil, and cleaning soaps loading area (Bulk Unload Area) at the General Motors Corporation (GM) Metal Fabrication Division (MFD) Grand Rapids Metal Plant (Plant) located at 300 36th Street in Wyoming, Michigan (Site). The subsurface investigation was conducted to further evaluate and delineate the concentration of metals and polynuclear aromatics (PNAs) in soils in the Bulk Unload Area.

1.0 INTRODUCTION/BACKGROUND

In November 2004, Plant personnel installed a trench drain in the Bulk Unload Area. The location of the Bulk Unload Area is presented on Figures 1 and 2. The trench drain is approximately 70 feet long by one-foot wide and drains to a sump located adjacent to the Bulk Unload Area. From there, liquids are discharged to a sump within the plant inside an adjacent truck dock, which discharges to the on-Site wastewater treatment plant via aboveground piping lines.

Prior to disposal, Plant personnel sampled excavated soils from the area for waste characterization. Toxicity characteristic leaching procedure (TCLP) analysis of the waste soil sample had detections of barium, cadmium, copper, lead, and zinc. Total analysis was also preformed on lead, diesel, and total petroleum hydrocarbons (other) for which there were detections. The soils were disposed of as a hazardous waste due to the concentration of lead identified. Analytical results for the waste characterization are provided in Attachment A. No verification samples were collected from the excavation.

According to plant personnel, the area of the trench drain was historically used for hand machining operations.

2.0 SCOPE OF WORK

Investigation activities included the advancement of seven soil borings and the collection of 33 soil samples. Figure 2 presents the trench drain layout and approximate soil boring locations.

2.1 SOIL BORING ADVANCEMENT

Seven soil borings, SB19-05 through SB25-05 (SB19 through SB25), were advanced at the Site on December 12, 2005 and a total of 33 soil samples were collected to define current soil conditions in the vicinity of the trench drain. Soil borings SB19 through SB24 were advanced around the perimeter of the trench drain and SB25 was advanced in the northwest corner inside the trench drain area.

Soil borings were advanced utilizing a 4 ¼-inch hollow stem auger (HSA) drill rig with continuous split-spoon sampling. Soil samples were collected starting at the top of the ground surface and continuing at two-foot intervals until a terminal depth of ten feet bgs, excluding SB23 and SB24, where samples were collected at 0 to 2 feet bgs, 4 to 6 feet bgs, and 8 to 10 feet bgs intervals. A two-foot long, two-inch outside diameter stainless steel split-spoon sampler was driven into the undisturbed material through the HSA auger. Soil samples were described and classified according to the Unified Soil Classification System (USCS) by a CRA Geologist. Soil samples were field screened for visual/olfactory evidence of impact and with an 11.7 eV photoionization detector (PID). Stratigraphic soil boring logs generated during the advancement of SB19 through SB25 are presented in Attachment B.

2.2 SOIL SAMPLE COLLECTION

Soil samples were collected at two-foot intervals using 4 ¼-inch HSA drill rig equipped with a two-foot stainless steel split-spoon sampler as described in Section 2.1. Samples were collected consistent with the protocols set forth in the Michigan Department of Environmental Quality (MDEQ) Remediation and Redevelopment Division (RRD) Operation Memorandum No. 2, October 2004.

One soil sample was collected for chemical analysis from each interval, in addition to quality assurance/quality control (QA/QC) samples. A total of 33 soil samples were collected for analysis for PNAs and Target Analyte List (TAL) metals. A sample summary is presented in Table 1. Collected samples were placed in pre-cleaned laboratory-provided containers, properly labeled, placed on ice, and shipped under chain-of-custody (COC) protocol via overnight courier to Severn Trent Laboratories (STL) in North Canton, Ohio to be analyzed on a two-week turnaround time (TAT).

3.0 RESULTS

Laboratory analytical results were compared to Michigan Public Act 451, Part 201 Generic Residential and Commercial I Cleanup Criteria (Part 201 Residential), as well as the Michigan Public Act 451, Part 201 Generic Industrial and Commercial II, III, and IV Criteria (Part 201 Industrial). A summary of analytical results compared to the Part 201 Residential Cleanup Criteria is presented in Table 2. Figure 3 provides a comparison to the Part 201 Residential Cleanup Criteria by location. A summary of analytical results compared to the Part 201 Industrial Cleanup Criteria is presented in Table 3. Figure 4 provides a

comparison to the Part 201 Industrial Cleanup Criteria by location. Analytical results for the investigation are provided in Attachment C. A copy of the data validation memorandum is provided in Attachment D.

Arsenic was detected at concentrations above the Part 201 Residential Drinking Water Protection Criteria (DWPC), Direct Contact Criteria (DCC), and State Default Background Level (SDBL) in the soil samples collected from SB20 (at 0 to 2 ft bgs and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs). Arsenic was detected at concentrations above the Part 201 Industrial DWPC and SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs).

Barium was detected at concentrations above the Part 201 Residential and Industrial Groundwater Surface Water Interface Protection Criteria (GSIC) and the SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs).

Cadmium was detected at concentrations above the Part 201 Residential and Industrial GSIC and the SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs). Additionally, cadmium was detected at concentrations above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs).

Total chromium was detected at concentrations above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB19 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs, 2 to 4 ft bgs, 4 to 6 ft bgs), SB21 (at 0 to 2 ft bgs, 2 to 4 ft bgs, 4 to 6 ft bgs, and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs and 4 to 6 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial DWPC in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs, 2 to 4 ft bgs, and 4 to 6 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs and 4 to 6 ft bgs). Total chromium was detected above the Part 201 Residential and Industrial Particulate Soil Inhalation Criteria (PSIC) in soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), and SB25 (at 2 to 4 ft bgs). Total chromium was detected above the Part 201 Residential DCC in soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Lead was detected above the Part 201 Residential DCC and SDBL in the soil samples collected from SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs), and SB25 (at 2 to 4 ft bgs), with the concentrations at SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs) also exceeding the Part 201 Industrial DCC. Lead was detected above the Part 201 Residential and Industrial DWPC and GSIC in the soil samples collected from SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs).

Mercury was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil sample collected from SB20 (at 0 to 2 ft bgs).

Selenium was detected above the Part 201 Residential and Industrial GSIC and SDBL in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), and SB21 (at 0 to 2 ft bgs and 6 to 8 ft bgs).

Silver was detected above the Part 201 Residential GSIC and SDBL in the soil samples collected from SB19 (at 2 to 4 ft bgs), SB20 (at 0 to 2 ft bgs), SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs), SB25 (at 2 to 4 ft bgs). Additionally, silver was detected above the Part 201 Residential DWPC in the soil samples collected from SB21 (at 4 to 6 ft bgs and 6 to 8 ft bgs) and SB25 (at 2 to 4 ft bgs), with the concentrations at SB21 (at 4 to 6 ft bgs) and SB25 (at 2 to 4 ft bgs) also exceeding the Part 201 Industrial DWPC.

Benzo(a)anthracene was detected above the Part 201 Residential DCC in the soil sample collected from SB20 (at 0 to 2 ft bgs), but below the Part 201 Industrial DCC.

Benzo(a)pyrene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs). Additionally, concentrations detected in soil samples from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs) and SB21 (at 2 to 4 ft bgs) exceeded the Part 201 Industrial DCC.

Benzo(b)fluoranthene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs) and SB21 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Dibenz(a,h)anthracene was detected above the Part 201 Residential DCC in the soil samples collected from SB20 (at 0 to 2 ft bgs) and SB21 (at 2 to 4 ft bgs), but below the Part 201 Industrial DCC.

Fluoranthene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs).

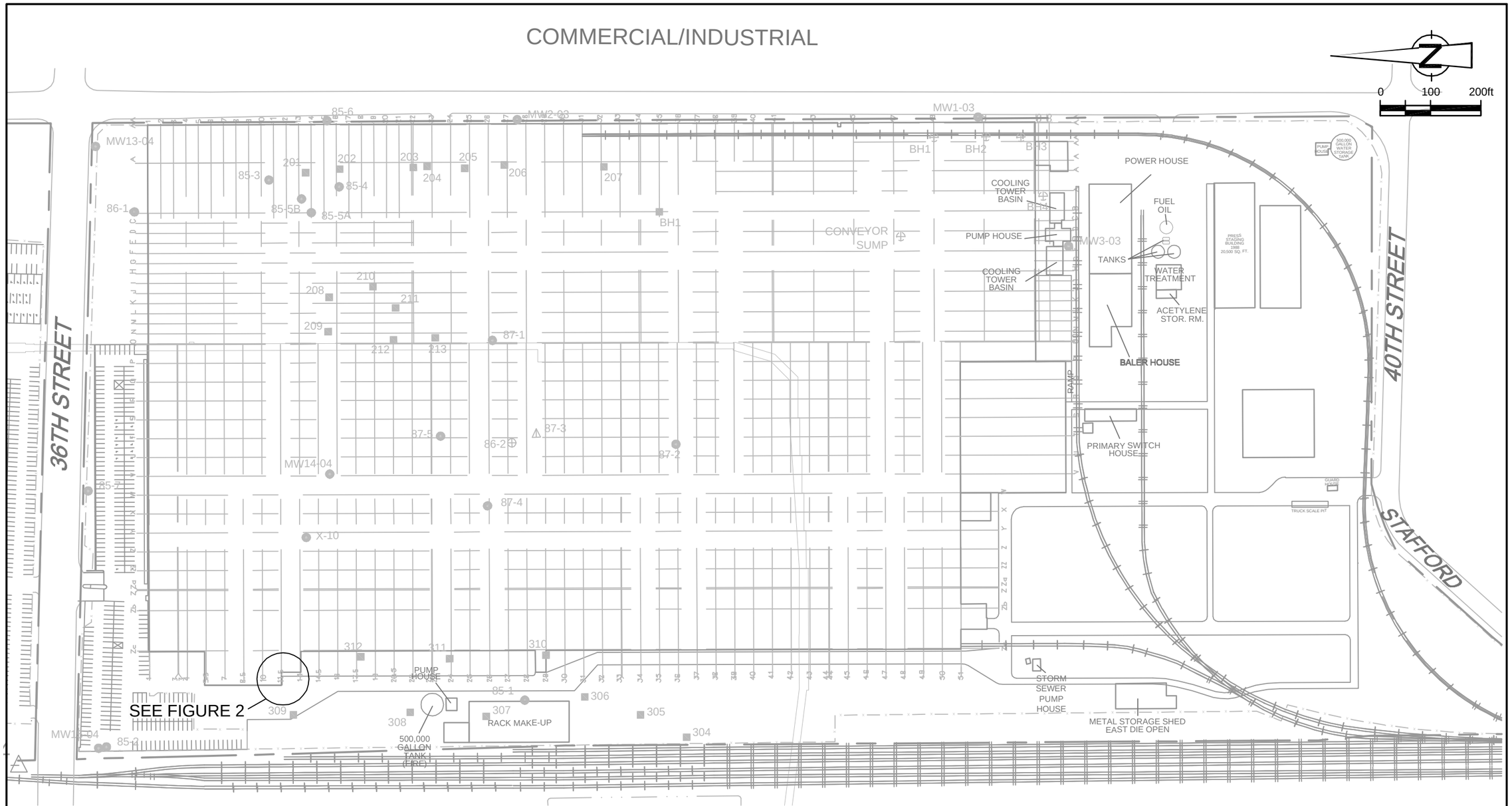
Naphthalene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs).

Phenanthrene was detected above the Part 201 Residential and Industrial GSIC in the soil samples collected from SB20 (at 0 to 2 ft bgs and 2 to 4 ft bgs), SB21 (at 2 to 4 ft bgs), and SB25 (at 0 to 2 ft bgs).

4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results identified that TAL metals and PNAs were detected in soil samples at concentrations above Part 201 Residential and/or Industrial Cleanup Criteria. Based on the analytical results, the horizontal and vertical extent has not been delineated to Part 201 Residential Criteria.

A Work Plan will be prepared for further investigation of the area, including a historical review of operations conducted and a subsurface investigation.



LEGEND

87-2	MONITORING WELL LOCATION
PWDISCH	PURGE WELL LOCATION
307	SOIL BORING LOCATION
X-10	DESTROYED/REMOVED MONITORING WELL LOCATION
C-2	CULVERT LOCATION
87-3	ABANDONED AIR PURGE WELL
BH1	APPROXIMATE LOCATION OF DEWATERING WELLS
	APPROXIMATE SITE BOUNDARY
	FENCE
	RAILROAD
	COLE DRAIN

SOURCE: EDI ENGINEERING & SCIENCE, JUNE 1987 AND JUNE 1988 AND EARTH TECH, SEPTEMBER 2001.

figure 1

APPROXIMATE BULK UNLOAD AREA
GRAND RAPIDS METAL PLANT
Wyoming, Michigan

17360-10(MEMO050)GN-DE002 SEP 08/2006

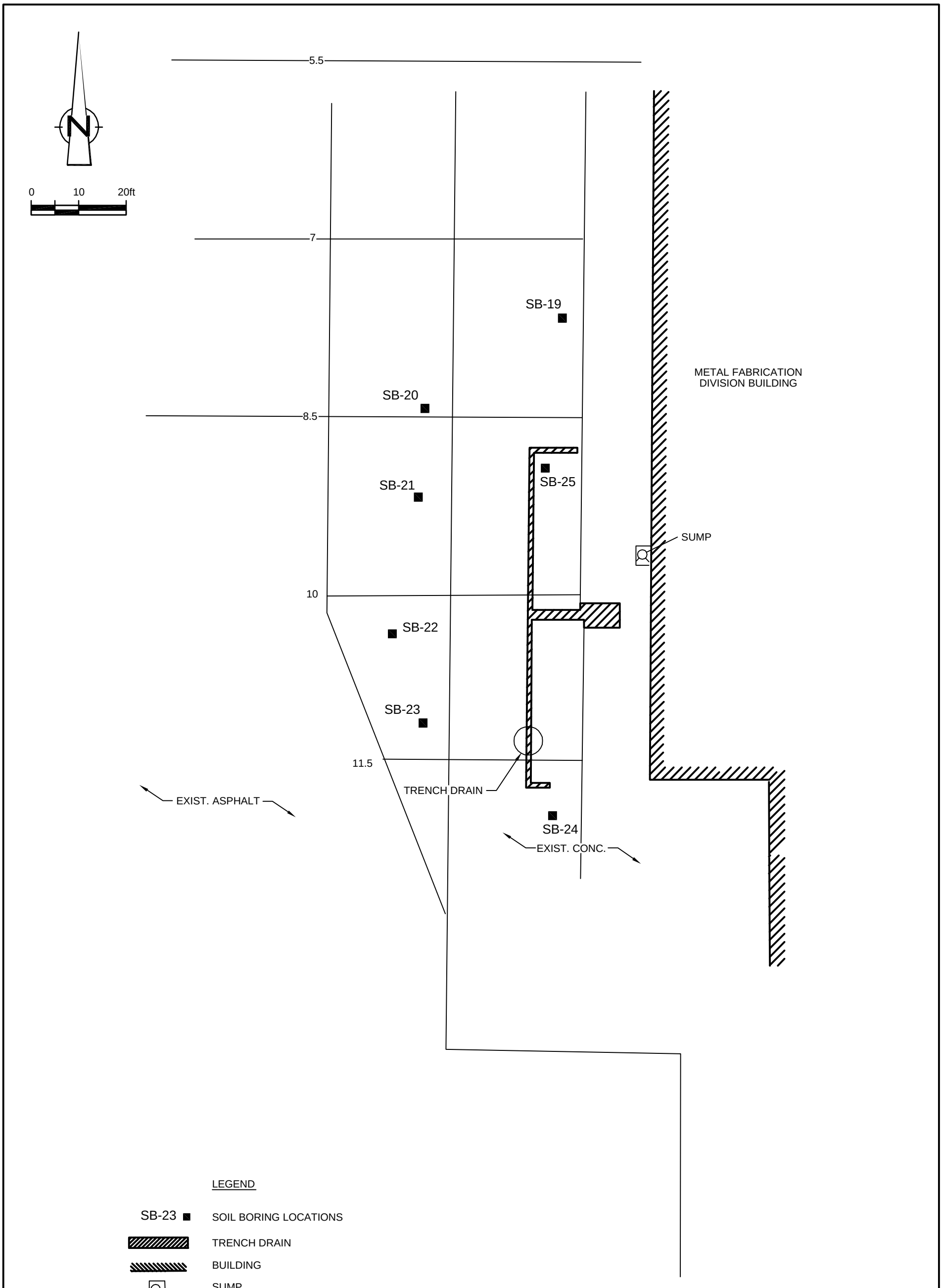
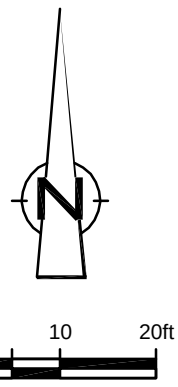


figure 2

APPROXIMATE SOIL BORING LOCATIONS
BULK UNLOAD AREA INVESTIGATION
GRAND RAPIDS METAL PLANT
Wyoming, Michigan

17360-10(MEMO050)GN-DE003 MAY 24/2006



SB19-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	2.2/2.3	5.4	1.2	1.0	0.68
Barium	13.7/17.8	91.1	7.4	3.7	5.0
Cadmium	0.16/0.21	2.3	0.086 U	0.085 U	0.034 J
Chromium Total	12.1/26.0 {B}	341 {AB}	4.8	4.2	3.8
Lead	8.6/6.8	75.2	1.8	1.9	1.9
Mercury	0.022 J/0.016 J	0.017 J	0.043 U	0.042 U	0.024 J
Selenium	0.43 U/0.43 U	0.60 {B}	0.43 U	0.42 U	0.45 U
Silver	0.43 U/0.43 U	3.0 {B}	0.43 U	0.42 U	0.45 U
SVOCs					
Benzo(a)anthracene	0.16 J/0.13 J	2 J	0.28 UJ	0.28 U	0.29 U
Benzo(a)pyrene	0.18 J/0.13 J	1.9 J	0.28 UJ	0.28 U	0.29 U
Benzo(b)fluoranthene	0.23 J/0.2 J	2.4 J	0.28 UJ	0.28 U	0.29 U
Dibenz(a,h)anthracene	0.037 J/0.026 J	0.34 J	0.28 UJ	0.28 U	0.29 U
Fluoranthene	0.25 J/0.21 J	4.2	0.009 J	0.28 U	0.29 U
Naphthalene	0.0075 J/0.011 J	0.51 J	0.28 UJ	0.28 U	0.29 U
Phenanthrene	0.098 J/0.09 J	3.1	0.28 UJ	0.28 U	0.29 U

SB20-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	18.5 {AD}	4.3	22.4 {AD}	1.2	0.73
Barium	608 {B}	287	21.6	13.4	4.7
Cadmium	4.5 {B}	0.39	0.77 J	0.058 J	0.086 U
Chromium Total	577 {AB}	49.1 {AB}	184 {AB}	8.6	5.9
Lead	575 {D}	46.0	24.0	4.7	3.2
Mercury	0.18 {B}	0.044	0.044 U	0.047 U	0.043 U
Selenium	1.7 {B}	0.36 J	4.4 U	0.47 U	0.43 U
Silver	1.5 {B}	0.43 U	4.4 U	0.47 U	0.43 U
SVOCs					
Benzo(a)anthracene	29 {D}	8.6	14 U	16 U	5.7 U
Benzo(a)pyrene	28 {D}	8.4 {D}	14 U	16 U	5.7 U
Benzo(b)fluoranthene	38 {D}	12	14 U	16 U	5.7 U
Dibenz(a,h)anthracene	6.2 J {D}	1.9 J	14 U	16 U	5.7 U
Fluoranthene	49 {B}	17 {B}	14 U	16 U	5.7 U
Naphthalene	2.6 J {B}	0.91 J {B}	14 U	16 U	5.7 U
Phenanthrene	30 {B}	14 {B}	14 U	16 U	5.7 U

SB21-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	5.3	2.6	23.7 {AD}	5.8	1.2
Barium	66.4	81.3	472 {B}	175	14.5
Cadmium	0.56	0.41	7.8 {AB}	2.5	0.087 U
Chromium Total	24.5 {B}	21.4 {B}	2800 {ABD}	768 {AB}	8.4
Lead	39.6	235	5410 {ABD}	371	4.0
Mercury	0.033 J	0.028 J	0.015 J	0.024 J	0.043 U
Selenium	0.48 {B}	0.43 U	4.5 U	0.77 {B}	0.43 U
Silver	0.43 U	0.43 U	15.3 {AB}	5.2 {AB}	0.43 U
SVOCs					
Benzo(a)anthracene	2.1 J/2.1 J	17	1.9/2.1 J	0.43	0.012 J
Benzo(a)pyrene	2 J/1.8 J	17 {D}	1.7/1.7	0.32 J	0.012 J
Benzo(b)fluoranthene	2.7 J/3 J	24 {D}	3/3 J	0.52	0.015 J
Dibenz(a,h)anthracene	0.45 J/0.43 J	3.4 J {D}	0.47 J/0.49	0.35 U	0.29 U
Fluoranthene	3.1 J/2.9 J	37 {B}	3.2/3.1 J	0.81	0.024 J
Naphthalene	0.092 J/0.083 J	11 U	0.24 J/0.27 J	0.35 U	0.29 U
Phenanthrene	2 J/2.2 J	23 {B}	2.4/2.4 J	0.63	0.02 J

SB22-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	2.9	3.2	0.72	1.8	0.84
Barium	88.0	64.8	8.1	9.4	7.5
Cadmium	0.58	0.37	0.086 U	0.087 U	0.037 J
Chromium Total	15.1	13.2	3.9	9.2	6.2
Lead	24.8	17.5	2.9	3.0	2.6
Mercury	0.043 U	0.046 U	0.043 U	0.044 U	0.044 U
Selenium	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U
Silver	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U
SVOCs					
Benzo(a)anthracene	0.047 J	0.047 J	1.4 U	1.4 U	0.29 U
Benzo(a)pyrene	0.049 J	0.045 J	1.4 U	1.4 U	0.29 U
Benzo(b)fluoranthene	0.087 J	0.081 J	1.4 U	1.4 U	0.29 U
Dibenz(a,h)anthracene	0.013 J	0.013 J	1.4 U	1.4 U	0.29 U
Fluoranthene	0.078 J	0.082 J	1.4 U	1.4 U	0.29 U
Naphthalene	0.042 J	0.036 J	1.4 U	1.4 U	0.29 U
Phenanthrene	0.1 J	0.1 J	1.4 U	1.4 U	0.29 U

SB25-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	0.64	29.4 {AD}	1.1	1.2/1.6	0.80
Barium	19.7	559 {B}	14.8	4.3/6.4	6.6
Cadmium	0.051 J	38.1 {AB}	0.10	0.084 U/0.057 J	0.037 J
Chromium Total	14.4	4970 {ABD}	46.3 {AB}	12.0/11.1	9.3
Lead	50.9	3710 {ABD}	18.5	4.6/10.3	5.6
Mercury	0.041 U	0.045 U	0.043 U	0.042 U/0.017 J	0.020 J
Selenium	0.41 U	9.1 U	0.43 U	0.42 U/0.42 U	0.43 U
Silver	0.41 U	31.1 {AB}	0.43 U	0.42 U/0.42 U	0.43 U
SVOCs					
Benzo(a)anthracene	6.5	0.44	0.031 J	0.021 J/0.032 J	0.013 J
Benzo(a)pyrene	6 {D}	0.51	0.025 J	0.015 J/0.026 J	0.0099 J
Benzo(b)fluoranthene	8.6	1.2	0.045 J	0.026 J/0.038 J	0.015 J
Dibenz(a,h)anthracene	1.2 J	0.3	0.28 U	0.28 U/0.28 U	0.28 U
Fluoranthene	16 {B}	0.79	0.067 J	0.046 J/0.068 J	0.026 J
Naphthalene	0.17 J	0.089 J	0.28 U	0.28 U/0.28 U	0.28 U
Phenanthrene	10 {B}	0.68	0.041 J	0.033 J/0.044 J	0.016 J

SB24-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals			
Arsenic	1.9	0.90	0.53
Barium	13.7	6.5	4.6
Cadmium	0.069 J	0.086 U	0.085 U
Chromium Total	7.4	4.8	3.3
Lead	5.2	1.6	0.99
Mercury	0.042 U	0.043 U	0.043 U
Selenium	0.42 U	0.43 U	0.43 U
Silver	0.42 U	0.43 U	0.43 U
SVOCs			
Benzo(a)anthracene	0.12 J	0.29 U	0.28 U
Benzo(a)pyrene	0.12 J	0.29 U	0.28 U
Benzo(b)fluoranthene	0.17 J	0.29 U	0.28 U
Dibenz(a,h)anthracene	0.022 J	0.29 U	0.28 U
Fluoranthene	0.28	0.29 U	0.28 U
Naphthalene	0.28 U	0.29 U	0.28 U
Phenanthrene	0.12 J	0.29 U	0.28 U

SB23-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals			
Arsenic	1.5	1.0	0.42 U
Barium	33.6	5.7	3.2
Cadmium	0.13	0.085 U	0.084 U
Chromium Total	6.3	5.8	3.0
Lead	7.6	2.0	1.2
Mercury	0.042 U	0.042 U	0.042 U
Selenium	0.42 U	0.42 U	0.42 U
Silver	0.42 U	0.42 U	0.42 U
SVOCs			
Benzo(a)anthracene	0.021 J	0.28 U	0.28 U
Benzo(a)pyrene	0.025 J	0.28 U	0.28 U
Benzo(b)fluoranthene	0.04 J	0.28 U	0.28 U
Dibenz(a,h)anthracene	0.28 U	0.28 U	0.28 U
Fluoranthene	0.04 J	0.28 U	0.28 U
Naphthalene	0.013 J	0.28 U	0.28 U
Phenanthrene	0.037 J	0.28 U	0.28 U

		Drinking Water Protection A	Groundwater Surface Water Interface Protection B	Soil Volatilization to Indoor Air Inhalation C	Direct Contact D
	Compund (mg/kg)				
Metals	Arsenic	4.6	70	NLV	7.6
	Barium	1300	440	NLV	37000
	Cadmium	6	3	NLV	550
	Chromium Total	30	3.3	NLV	2500
	Lead	700	2500	NLV	400
	Mercury	1.7	0.1	48	160
	Selenium	4	0.4	NLV	2600
	Silver	4.5	0.1	NLV	2500
SVOCs	Benzo(a)anthracene	NLL	NLL	NLV	20
	Benzo(a)pyrene	NLL	NLL	NLV	2
	Benzo(b)fluoranthene	NLL	NLL	ID	20
	Dibenz(a,h)anthracene	NLL	NLL	NLV	2
	Fluoranthene	730	5.5	1000000	46000
	Naphthalene	35	0.87	250	16000
	Phenanthrene	56	5.3	2800	1600

LEGEND

SB-23 ■ SOIL BORING LOCATIONS

TRENCH DRAIN

BUILDING

SUMP

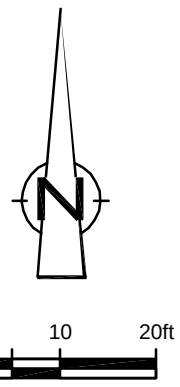
5.5 PLANT COLUMN NUMBER

{A} - EXCEEDS STATEWIDE DRINKING WATER PROTECTION
{B} - EXCEEDS GROUNDWATER SURFACE WATER INTERFACE PROTECTION
{C} - EXCEEDS SOIL VOLATILIZATION TO INDOOR AIR INHALATION
{D} - EXCEEDS DIRECT CONTACT

figure 3

EXCEEDANCE OF PART 201 RESIDENTIAL CRITERIA
BULK UNLOAD AREA INVESTIGATION
GRAND RAPIDS METAL PLANT
Wyoming, Michigan

17360-10(MEMO050)GN-DE004 SEP 06/2006



SB19-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	2.2/2.3	5.4	1.2	1.0	0.68
Barium	13.7/17.8	91.1	7.4	3.7	5.0
Cadmium	0.16/0.21	2.3	0.086 U	0.085 U	0.034 J
Chromium Total	12.1/26.0 {B}	341 {AB}	4.8	4.2	3.8
Lead	8.6/6.8	75.2	1.8	1.9	1.9
Mercury	0.022 J/0.016 J	0.017 J	0.043 U	0.042 U	0.024 J
Selenium	0.43 U/0.43 U	0.60 {B}	0.43 U	0.42 U	0.45 U
Silver	0.43 U/0.43 U	3.0 {B}	0.43 U	0.42 U	0.45 U
SVOCs					
Benzo(a)anthracene	0.16 J/0.13 J	2 J	0.28 UJ	0.28 U	0.29 U
Benzo(a)pyrene	0.18 J/0.13 J	1.9 J	0.28 UJ	0.28 U	0.29 U
Benzo(b)fluoranthene	0.23 J/0.2 J	2.4 J	0.28 UJ	0.28 U	0.29 U
Dibenz(a,h)anthracene	0.037 J/0.026 J	0.34 J	0.28 UJ	0.28 U	0.29 U
Fluoranthene	0.25 J/0.21 J	4.2	0.009 J	0.28 U	0.29 U
Naphthalene	0.0075 J/0.011 J	0.51 J	0.28 UJ	0.28 U	0.29 U
Phenanthrene	0.098 J/0.09 J	3.1	0.28 UJ	0.28 U	0.29 U

SB20-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	18.5 {A}	4.3	22.4 {A}	1.2	0.73
Barium	608 {B}	287	21.6	13.4	4.7
Cadmium	4.5 {B}	0.39	0.77 J	0.058 J	0.086 U
Chromium Total	577 {AB}	49.1 {AB}	184 {AB}	8.6	5.9
Lead	575	46.0	24.0	4.7	3.2
Mercury	0.18 {B}	0.044	0.044 U	0.047 U	0.043 U
Selenium	1.7 {B}	0.36 J	4.4 U	0.47 U	0.43 U
Silver	1.5 {B}	0.43 U	4.4 U	0.47 U	0.43 U
SVOCs					
Benzo(a)anthracene	29	8.8	14 U	16 U	5.7 U
Benzo(a)pyrene	28 {E}	8.4 {E}	14 U	16 U	5.7 U
Benzo(b)fluoranthene	38	12	14 U	16 U	5.7 U
Dibenz(a,h)anthracene	6.2 J	1.9 J	14 U	16 U	5.7 U
Fluoranthene	49 {B}	17 {B}	14 U	16 U	5.7 U
Naphthalene	2.6 J {B}	0.91 J {B}	14 U	16 U	5.7 U
Phenanthrene	30 {B}	14 {B}	14 U	16 U	5.7 U

SB21-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	5.3	2.6	23.7 {A}	5.8	1.2
Barium	66.4	81.3	472 {B}	175	14.5
Cadmium	0.56	0.41	7.8 {AB}	2.5	0.087 U
Chromium Total	24.5 {B}	21.4 {B}	2800 {AB}	768 {AB}	8.4
Lead	39.6	235	5410 {ABE}	371	4.0
Mercury	0.033 J	0.028 J	0.015 J	0.024 J	0.043 U
Selenium	0.48 {B}	0.43 U	4.5 U	0.77 {B}	0.43 U
Silver	0.43 U	0.43 U	15.3 {AB}	5.2 {B}	0.43 U
SVOCs					
Benzo(a)anthracene	2.1 J/2.1 J	17	1.9/2.1 J	0.43	0.012 J
Benzo(a)pyrene	2 J/1.8 J	17 {E}	1.7/1.7	0.32 J	0.012 J
Benzo(b)fluoranthene	2.7 J/3 J	24	3/3 J	0.52	0.015 J
Dibenz(a,h)anthracene	0.45 J/0.43 J	3.4 J	0.47 J/0.49	0.35 U	0.29 U
Fluoranthene	3.1 J/2.9 J	37 {B}	3.2/3.1 J	0.81	0.024 J
Naphthalene	0.092 J/0.083 J	11 U	0.24 J/0.27 J	0.35 U	0.29 U
Phenanthrene	2 J/2.2 J	23 {B}	2.4/2.4 J	0.63	0.02 J

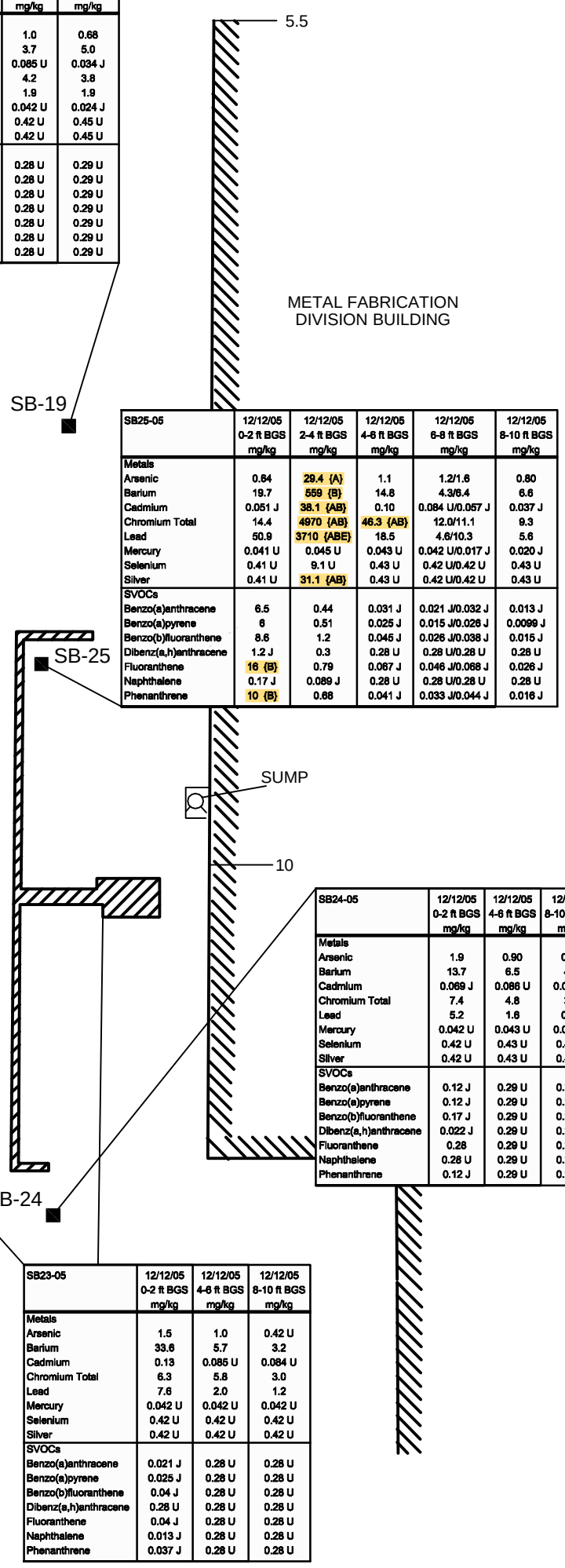
SB22-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	2.9	3.2	0.72	1.8	0.84
Barium	88.0	64.8	8.1	9.4	7.5
Cadmium	0.58	0.37	0.086 U	0.087 U	0.037 J
Chromium Total	15.1	13.2	3.9	9.2	6.2
Lead	24.8	17.5	2.9	3.0	2.6
Mercury	0.043 U	0.046 U	0.043 U	0.044 U	0.044 U
Selenium	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U
Silver	0.43 U	0.46 U	0.43 U	0.44 U	0.44 U
SVOCs					
Benzo(a)anthracene	0.047 J	0.047 J	1.4 U	1.4 U	0.29 U
Benzo(a)pyrene	0.049 J	0.045 J	1.4 U	1.4 U	0.29 U
Benzo(b)fluoranthene	0.087 J	0.081 J	1.4 U	1.4 U	0.29 U
Dibenz(a,h)anthracene	0.013 J	0.013 J	1.4 U	1.4 U	0.29 U
Fluoranthene	0.078 J	0.082 J	1.4 U	1.4 U	0.29 U
Naphthalene	0.042 J	0.036 J	1.4 U	1.4 U	0.29 U
Phenanthrene	0.1 J	0.1 J	1.4 U	1.4 U	0.29 U

SB23-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals			
Arsenic	1.5	1.0	0.42 U
Barium	33.6	5.7	3.2
Cadmium	0.13	0.085 U	0.084 U
Chromium Total	6.3	5.8	3.0
Lead	7.6	2.0	1.2
Mercury	0.042 U	0.042 U	0.042 U
Selenium	0.42 U	0.42 U	0.42 U
Silver	0.42 U	0.42 U	0.42 U
SVOCs			
Benzo(a)anthracene	0.021 J	0.28 U	0.28 U
Benzo(a)pyrene	0.025 J	0.28 U	0.28 U
Benzo(b)fluoranthene	0.04 J	0.28 U	0.28 U
Dibenz(a,h)anthracene	0.28 U	0.28 U	0.28 U
Fluoranthene	0.04 J	0.28 U	0.28 U
Naphthalene	0.013 J	0.28 U	0.28 U
Phenanthrene	0.037 J	0.28 U	0.28 U

SB25-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 2-4 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 6-8 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals					
Arsenic	0.64	29.4 {A}	1.1	1.2/1.6	0.80
Barium	19.7	559 {B}	14.8	4.3/6.4	6.6
Cadmium	0.051 J	38.1 {AB}	0.10	0.084 U/0.057 J	0.037 J
Chromium Total	14.4	4970 {AB}	46.3 {AB}	12.0/11.1	9.3
Lead	50.9	3710 {ABE}	18.5	4.6/10.3	5.6
Mercury	0.041 U	0.045 U	0.043 U	0.042 U/0.017 J	0.020 J
Selenium	0.41 U	9.1 U	0.43 U	0.42 U/0.42 U	0.43 U
Silver	0.41 U	31.1 {AB}	0.43 U	0.42 U/0.42 U	0.43 U
SVOCs					
Benzo(a)anthracene	6.5	0.44	0.031 J	0.021 J/0.032 J	0.013 J
Benzo(a)pyrene	6	0.51	0.025 J	0.015 J/0.026 J	0.0099 J
Benzo(b)fluoranthene	8.6	1.2	0.045 J	0.026 J/0.038 J	0.015 J
Dibenz(a,h)anthracene	1.2 J	0.3	0.28 U	0.28 U/0.28 U	0.28 U
Fluoranthene	16 {B}	0.79	0.067 J	0.046 J/0.068 J	0.026 J
Naphthalene	0.17 J	0.089 J	0.28 U	0.28 U/0.28 U	0.28 U
Phenanthrene	10 {B}	0.68	0.041 J	0.033 J/0.044 J	0.016 J

SB24-05	12/12/05 0-2 ft BGS mg/kg	12/12/05 4-6 ft BGS mg/kg	12/12/05 8-10 ft BGS mg/kg
Metals			
Arsenic	1.9	0.90	0.53
Barium	13.7	6.5	4.6
Cadmium	0.069 J	0.086 U	0.085 U
Chromium Total	7.4	4.8	3.3
Lead	5.2	1.6	0.99
Mercury	0.042 U	0.043 U	0.043 U
Selenium	0.42 U	0.43 U	0.43 U
Silver	0.42 U	0.43 U	0.43 U
SVOCs			
Benzo(a)anthracene	0.12 J	0.29 U	0.28 U
Benzo(a)pyrene	0.12 J	0.29 U	0.28 U
Benzo(b)fluoranthene	0.17 J	0.29 U	0.28 U
Dibenz(a,h)anthracene	0.022 J	0.29 U	0.28 U
Fluoranthene	0.28	0.29 U	0.28 U
Naphthalene	0.28 U	0.29 U	0.28 U
Phenanthrene	0.12 J	0.29 U	0.28 U

		Industrial and Commercial Drinking Water A	Groundwater Surface Water Interface Protection B	Groundwater Contact Protection C	Soil Volatilization to Indoor Air Inhalation D	Direct Contact Industrial and Commercial II E
	Compound (mg/kg)					
Metals	Arsenic	4.6	70	2000	NLV	37
	Barium	1300	440	1000000	NLV	130000
	Cadmium	6	3	230000	NLV	2100
	Chromium Total	30	3.3	140000	NLV	9200
	Lead	700	2500	ID	NLV	900
	Mercury	1.7	0.1	47	89	580
	Selenium	4	0.4	78000	NLV	9600
	Silver	13	0.1	200000	NLV	9000
SVOCs	Benzo(a)anthracene	NLL	NLL	NLL	NLV	80
	Benzo(a)pyrene	NLL	NLL	NLL	NLV	8
	Benzo(b)fluoranthene	NLL	NLL	NLL	ID	80
	Dibenz(a,h)anthracene	NLL	NLL	NLL	NLV	8
	Fluoranthene	730	5.5	730	1000000	130000
	Naphthalene	100	0.87	2100	470	52000
	Phenanthrene	160	5.3	1100	5100	5200



LEGEND

SB-23 ■ SOIL BORING LOCATIONS

TRENCH DRAIN

BUILDING

SUMP

5.5 PLANT COLUMN NUMBER

{A} - EXCEEDS INDUSTRIAL AND COMMERCIAL DRINKING WATER
{B} - EXCEEDS GROUNDWATER SURFACE WATER INTERFACE PROTECTION
{C} - EXCEEDS GROUNDWATER CONTACT PROTECTION
{D} - EXCEEDS SOIL VOLATILIZATION TO INDOOR AIR INHALATION
{E} - EXCEEDS DIRECT CONTACT INDUSTRIAL AND COMMERCIAL II

figure 4

EXCEEDANCE OF PART 201 INDUSTRIAL CRITERIA
BULK UNLOAD AREA INVESTIGATION
GRAND RAPIDS METAL PLANT
Wyoming, Michigan

TABLE 1

SAMPLE SUMMARY
2005 BULK UNLOAD AREA INVESTIGATION SUMMARY
GENERAL MOTOR CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Identification	*Sample Location*	*Sample Depth (ft bgs)*	*Sample Matrix*	*QA/QC*	*Analysis*
SO-17360-121205-DCR-585	SB25-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-586	SB25-05	2 - 4	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-587	SB25-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-588	SB25-05	6 - 8	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-589	SB25-05	6 - 8	Soil	Duplicate	TAL Metals and PNAs
SO-17360-121205-DCR-590	SB25-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-591	SB24-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-592	SB24-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-593	SB24-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-594	SB23-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-595	SB23-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-596	SB23-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-597	SB22-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-598	SB22-05	2 - 4	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-599	SB22-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-600	SB22-05	6 - 8	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-601	SB22-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-602	SB21-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-603	SB21-05	2 - 4	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-604	SB21-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-605	SB21-05	6 - 8	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-606	SB21-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-607	SB20-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-608	SB20-05	2 - 4	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-609	SB20-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-610	SB20-05	6 - 8	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-611	SB20-05	8 - 10	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-612	SB19-05	0 - 2	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-613	SB19-05	0 - 2	Soil	Duplicate	TAL Metals and PNAs
SO-17360-121205-DCR-614	SB19-05	2 - 4	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-615	SB19-05	4 - 6	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-616	SB19-05	6 - 8	Soil		TAL Metals and PNAs
SO-17360-121205-DCR-617	SB19-05	8 - 10	Soil		TAL Metals and PNAs

PNA - Polynuclear Aromatic Compounds
TAL Metals - Target Analyte List Metals
QC - Quality Control

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location						*Michigan Act 451, Part 201 Residential and Commercial* [1]						***SB19-05***	***SB19-05***	***SB19-05***	***SB19-05***	***SB19-05***	***SB19-05***
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	***SO-17360-121205-DCR-612***	***SO-17360-121205-DCR-613***	***SO-17360-121205-DCR-614***	***SO-17360-121205-DCR-615***	***SO-17360-121205-DCR-616***	***SO-17360-121205-DCR-617***
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			***0-2 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***	***8-10 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j		***Duplicate***				
	Units																
PNAs																	
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	0.011 J	0.013 J	0.47 J	0.28 UJ	0.28 U	0.29 U
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	0.28 UJ	0.28 U	0.37 J	0.28 UJ	0.28 U	0.29 U
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	0.28 UJ	0.28 U	2.9 U	0.28 UJ	0.28 U	0.29 U
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	0.023 J	0.023 J	0.75 J	0.28 UJ	0.28 U	0.29 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.16 J	0.13 J	2 J	0.28 UJ	0.28 U	0.29 U
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	0.18 J	0.13 J	1.9 J	0.28 UJ	0.28 U	0.29 U
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	0.23 J	0.2 J	2.4 J	0.28 UJ	0.28 U	0.29 U
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	0.14 J	0.095 J	1.4 J	0.28 UJ	0.28 U	0.29 U
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	0.07 J	0.071 J	1.1 J	0.28 UJ	0.28 U	0.29 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	0.17 J	0.13 J	2.2 J	0.28 UJ	0.28 U	0.29 U
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	0.037 J	0.026 J	0.34 J	0.28 UJ	0.28 U	0.29 U
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	0.25 J	0.21 J	4.2	0.009 J	0.28 U	0.29 U
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	0.28 UJ	0.0073 J	0.43 J	0.28 UJ	0.28 U	0.29 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.12 J	0.084 J	1.2 J	0.28 UJ	0.28 U	0.29 U
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	0.0075 J	0.011 J	0.51 J	0.28 UJ	0.28 U	0.29 U
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	0.098 J	0.09 J	3.1	0.28 UJ	0.28 U	0.29 U
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	0.21 J	0.18 J	3.2	0.28 UJ	0.28 U	0.29 U
Metals																	
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	2.3	2.2	5.4	1.2	1.0	0.68
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	17.8	13.7	91.1	7.4	3.7	5.0
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	0.21	0.16	2.3	0.086 U	0.085 U	0.034 J
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	**26.0**[ac]	12.1	**341**[abcf]	4.8	4.2	3.8
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	8.6	6.8	75.2	1.8	1.9	1.9
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	0.016 J	0.022 J	0.017 J	0.043 U	0.042 U	0.024 J
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	0.43 U	0.43 U	**0.60**[ac]	0.43 U	0.42 U	0.45 U
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	0.43 U	0.43 U	**3.0**[ac]	0.43 U	0.42 U	0.45 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location						*Michigan Act 451, Part 201 Residential and Commercial* [1]						***SB20-05***	***SB20-05***	***SB20-05***	***SB20-05***	***SB20-05***	***SB21-05***
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	***SO-17360-121205-DCR-607***	***SO-17360-121205-DCR-608***	***SO-17360-121205-DCR-609***	***SO-17360-121205-DCR-610***	***SO-17360-121205-DCR-611***	***SO-17360-121205-DCR-602***
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j						
	Units																
PNAs																	
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	1.5 J	0.71 J	14 U	16 U	5.7 U	0.13 J
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	2.3 J	1.3 J	14 U	16 U	5.7 U	0.18 J
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	2.1 J	5.7 U	14 U	16 U	5.7 U	0.026 J
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	9 J	2.9 J	14 U	16 U	5.7 U	0.57 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	29[J]	8.8	14 U	16 U	5.7 U	2.1 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	28[J]	8.4[J]	14 U	16 U	5.7 U	2 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	38[J]	12	14 U	16 U	5.7 U	3 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	21	6.3	14 U	16 U	5.7 U	1.3 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	14 J	4.4 J	14 U	16 U	5.7 U	0.82 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	32	12	14 U	16 U	5.7 U	2.6 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	6.2 J[J]	1.9 J	14 U	16 U	5.7 U	0.43 J
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	49[c]	17[c]	14 U	16 U	5.7 U	3.1 J
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	3.5 J	1.5 J	14 U	16 U	5.7 U	0.26 J
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	17	5.2 J	14 U	16 U	5.7 U	1.1 J
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	2.6 J[c]	0.91 J[c]	14 U	16 U	5.7 U	0.092 J
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	30[c]	14[c]	14 U	16 U	5.7 U	2.2 J
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	39	14	14 U	16 U	5.7 U	2.6 J
Metals																	
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	**18.5**[abj]	4.3	**22.4**[abj]	1.2	0.73	5.3
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	**608**[ac]	287	21.6	13.4	4.7	66.4
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	**4.5**[ac]	0.39	0.77 J	0.058 J	0.086 U	0.56
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	**577**[abcj]	**49.1**[abc]	**184**[abc]	8.6	5.9	**24.5**[ac]
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	**575**[aj]	46.0	24.0	4.7	3.2	39.6
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	**0.18**[ac]	0.044	0.044 U	0.047 U	0.043 U	0.033 J
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	**1.7**[ac]	0.36 J	4.4 U	0.47 U	0.43 U	**0.48**[ac]
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	**1.5**[ac]	0.43 U	4.4 U	0.47 U	0.43 U	0.43 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location						*Michigan Act 451, Part 201 Residential and Commercial* [1]						***SB21-05***	***SB21-05***	***SB21-05***	***SB21-05***	***SB22-05***	***SB22-05***
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	***SO-17360-121205-DCR-603***	***SO-17360-121205-DCR-604***	***SO-17360-121205-DCR-605***	***SO-17360-121205-DCR-606***	***SO-17360-121205-DCR-597***	***SO-17360-121205-DCR-598***
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j						
	Units																
PNAs																	
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	11 U	0.078 J	0.35 U	0.29 U	0.086 J	0.079 J
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	1.9 J	0.18 J	0.043 J	0.29 U	0.28 U	0.3 U
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	11 U	0.017 J	0.35 U	0.29 U	0.01 J	0.3 U
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	5.2 J	0.54	0.12 J	0.29 U	0.0099 J	0.0098 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	17	1.9	0.43	0.012 J	0.047 J	0.047 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	17[J]	1.7	0.32 J	0.012 J	0.049 J	0.045 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	24[J]	3	0.52	0.015 J	0.087 J	0.081 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	12	1.3	0.25 J	0.29 U	0.046 J	0.045 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	8.9 J	1	0.12 J	0.29 U	0.022 J	0.022 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	21	2.6	0.49	0.013 J	0.08 J	0.079 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	3.4 J[J]	0.49	0.35 U	0.29 U	0.013 J	0.013 J
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	37[c]	3.2	0.81	0.024 J	0.078 J	0.082 J
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	2.2 J	0.23 J	0.047 J	0.29 U	0.28 U	0.3 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	10 J	1.2	0.21 J	0.29 U	0.033 J	0.032 J
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	11 U	0.27 J	0.35 U	0.29 U	0.042 J	0.036 J
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	23[c]	2.4	0.63	0.02 J	0.1 J	0.1 J
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	29	2.5	0.64	0.019 J	0.065 J	0.067 J
Metals																	
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	2.6	**23.7**[abj]	5.8	1.2	2.9	3.2
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	81.3	**472**[ac]	175	14.5	88.0	64.8
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	0.41	**7.8**[abc]	2.5	0.087 U	0.58	0.37
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	**21.4**[ac]	**2800**[abcj]	**768**[abcj]	8.4	15.1	13.2
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	235	**5410**[abcj]	371	4.0	24.8	17.5
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	0.028 J	0.015 J	0.024 J	0.043 U	0.043 U	0.046 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	0.43 U	4.5 U	**0.77**[ac]	0.43 U	0.43 U	0.46 U
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	0.43 U	**15.3**[abc]	**5.2**[abc]	0.43 U	0.43 U	0.46 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																	
						Michigan Act 451, Part 201 Residential and Commercial [(1)]						***SB22-05***	***SB22-05***	***SB22-05***	***SB23-05***	***SB23-05***	***SB23-05***
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	***SO-17360-121205-DCR-599***	***SO-17360-121205-DCR-600***	***SO-17360-121205-DCR-601***	***SO-17360-121205-DCR-594***	***SO-17360-121205-DCR-595***	***SO-17360-121205-DCR-596***
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			***4-6 ft BGS***	***6-8 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***	***4-6 ft BGS***	***8-10 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j						
	Units																
PNAs																	
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	1.4 U	1.4 U	0.29 U	0.025 J	0.28 U	0.28 U
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	1.4 U	1.4 U	0.29 U	0.021 J	0.28 U	0.28 U
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	1.4 U	1.4 U	0.29 U	0.025 J	0.28 U	0.28 U
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	1.4 U	1.4 U	0.29 U	0.04 J	0.28 U	0.28 U
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	1.4 U	1.4 U	0.29 U	0.02 J	0.28 U	0.28 U
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	1.4 U	1.4 U	0.29 U	0.015 J	0.28 U	0.28 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	1.4 U	1.4 U	0.29 U	0.036 J	0.28 U	0.28 U
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	1.4 U	1.4 U	0.29 U	0.04 J	0.28 U	0.28 U
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	1.4 U	1.4 U	0.29 U	0.28 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	1.4 U	1.4 U	0.29 U	0.015 J	0.28 U	0.28 U
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	1.4 U	1.4 U	0.29 U	0.013 J	0.28 U	0.28 U
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	1.4 U	1.4 U	0.29 U	0.037 J	0.28 U	0.28 U
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	1.4 U	1.4 U	0.29 U	0.035 J	0.28 U	0.28 U
Metals																	
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	0.72	1.8	0.84	1.5	1.0	0.42 U
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	8.1	9.4	7.5	33.6	5.7	3.2
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	0.086 U	0.087 U	0.037 J	0.13	0.085 U	0.084 U
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	3.9	9.2	6.2	6.3	5.8	3.0
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	2.9	3.0	2.6	7.6	2.0	1.2
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	0.043 U	0.044 U	0.044 U	0.042 U	0.042 U	0.042 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	0.43 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	0.43 U	0.44 U	0.44 U	0.42 U	0.42 U	0.42 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location						*Michigan Act 451, Part 201 Residential and Commercial* [1]						***SB24-05***	***SB24-05***	***SB24-05***	***SB25-05***	***SB25-05***	***SB25-05***
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	***SO-17360-121205-DCR-591***	***SO-17360-121205-DCR-592***	***SO-17360-121205-DCR-593***	***SO-17360-121205-DCR-585***	***SO-17360-121205-DCR-586***	***SO-17360-121205-DCR-587***
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			***0-2 ft BGS***	***4-6 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j						
	Units																
PNAs																	
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	0.0082 J	0.29 U	0.28 U	0.09 J	0.035 J	0.28 U
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	0.012 J	0.29 U	0.28 U	1.1 J	0.3 U	0.28 U
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	0.28 U	0.29 U	0.28 U	3.4 U	0.3 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	0.035 J	0.29 U	0.28 U	2.5 J	0.052 J	0.0082 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.12 J	0.29 U	0.28 U	6.5	0.44	0.031 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	0.12 J	0.29 U	0.28 U	6[J]	0.51	0.025 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	0.17 J	0.29 U	0.28 U	8.6	1.2	0.045 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	0.09 J	0.29 U	0.28 U	3.9	0.86	0.021 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	0.051 J	0.29 U	0.28 U	3.2 J	0.33	0.015 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	0.13 J	0.29 U	0.28 U	7.5	0.69	0.037 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	0.022 J	0.29 U	0.28 U	1.2 J	0.3	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	0.28	0.29 U	0.28 U	16[c]	0.79	0.067 J
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	0.0094 J	0.29 U	0.28 U	0.94 J	0.022 J	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.077 J	0.29 U	0.28 U	3.7	0.63	0.017 J
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	0.28 U	0.29 U	0.28 U	0.17 J	0.089 J	0.28 U
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	0.12 J	0.29 U	0.28 U	10[c]	0.68	0.041 J
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	0.21 J	0.29 U	0.28 U	12	0.53	0.047 J
Metals																	
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	1.9	0.90	0.53	0.64	**29.4[abj]**	1.1
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	13.7	6.5	4.6	19.7	**559[ac]**	14.8
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	0.069 J	0.086 U	0.085 U	0.051 J	**38.1[abc]**	0.10
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	7.4	4.8	3.3	14.4	**4970[abcj]**	**46.3[abc]**
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	5.2	1.6	0.99	50.9	**3710[abcj]**	18.5
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	0.042 U	0.043 U	0.043 U	0.041 U	0.045 U	0.043 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	0.42 U	0.43 U	0.43 U	0.41 U	9.1 U	0.43 U
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	0.42 U	0.43 U	0.43 U	0.41 U	**31.1[abc]**	0.43 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 RESIDENTIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location													
Sample Identification		Statewide	Drinking	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct	SB25-05	SB25-05	SB25-05
Sample Date		Default	Water	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Contact	SO-17360-121205-DCR-588	SO-17360-121205-DCR-589	SO-17360-121205-DCR-590
Sample Depth		Background	Protection	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness			12/12/2005	12/12/2005	12/12/2005
Sample Type		a	b	c	d	e	f	g	h	i	j	6-8 ft BGS	6-8 ft BGS	8-10 ft BGS
													Duplicate	
	Units													
PNAs														
2-Methylnaphthalene	mg/kg		57	ID	5500	ID	ID	ID	ID	ID	8100	0.28 U	0.28 U	0.28 U
Acenaphthene	mg/kg		300	4.4	970	190000	81000	81000	81000	14000000	41000	0.28 U	0.28 U	0.28 U
Acenaphthylene	mg/kg		5.9	ID	440	1600	2200	2200	2200	2300000	1600	0.28 U	0.28 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1400000	1400000	1400000	67000000	230000	0.28 U	0.0076 J	0.28 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.021 J	0.032 J	0.013 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1500	2	0.015 J	0.026 J	0.0099 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	20	0.026 J	0.038 J	0.015 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	800000	2500	0.011 J	0.017 J	0.0072 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	200	0.0092 J	0.018 J	0.28 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	2000	0.024 J	0.033 J	0.014 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	2	0.28 U	0.28 U	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	740000	740000	740000	9300000	46000	0.046 J	0.068 J	0.026 J
Fluorene	mg/kg		390	5.3	890	580000	130000	130000	130000	9300000	27000	0.28 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20	0.0095 J	0.016 J	0.28 U
Naphthalene	mg/kg		35	0.87	2100	250	300	300	300	200000	16000	0.28 U	0.28 U	0.28 U
Phenanthrene	mg/kg		56	5.3	1100	2800	160	160	160	6700	1600	0.033 J	0.044 J	0.016 J
Pyrene	mg/kg		480	ID	480	1000000	650000	650000	650000	6700000	29000	0.034 J	0.047 J	0.019 J
Metals														
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	720	7.6	1.6	1.2	0.80
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	330000	37000	6.4	4.3	6.6
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	1700	550	0.057 J	0.084 U	0.037 J
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	260	2500	12.0	11.1	9.3
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	100000	400	10.3	4.6	5.6
Mercury	mg/kg	0.13	1.7	0.1	47	48	52	52	52	20000	160	0.042 U	0.017 J	0.020 J
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	130000	2600	0.42 U	0.42 U	0.43 U
Silver	mg/kg	1	4.5	0.1	200000	NLV	NLV	NLV	NLV	6700	2500	0.42 U	0.42 U	0.43 U

(1) Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 1/23/2006, pursuant to 1994 PA 451 as amended.

Notes:
U - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SB19-05***	***SB19-05***	***SB19-05***	***SB19-05***	***SB19-05***
												SO-17360-121205-DCR-612	***SO-17360-121205-DCR-613***	***SO-17360-121205-DCR-614***	***SO-17360-121205-DCR-615***	***SO-17360-121205-DCR-616***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***0-2 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j		***Duplicate***			
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.011 J	0.013 J	0.47 J	0.28 UJ	0.28 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.28 UJ	0.28 U	0.37 J	0.28 UJ	0.28 U
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.28 UJ	0.28 U	2.9 U	0.28 UJ	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.023 J	0.023 J	0.75 J	0.28 UJ	0.28 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.16 J	0.13 J	2 J	0.28 UJ	0.28 U
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.18 J	0.13 J	1.9 J	0.28 UJ	0.28 U
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.23 J	0.2 J	2.4 J	0.28 UJ	0.28 U
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.14 J	0.095 J	1.4 J	0.28 UJ	0.28 U
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.07 J	0.071 J	1.1 J	0.28 UJ	0.28 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.17 J	0.13 J	2.2 J	0.28 UJ	0.28 U
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.037 J	0.026 J	0.34 J	0.28 UJ	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.25 J	0.21 J	4.2	0.009 J	0.28 U
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.28 UJ	0.0073 J	0.43 J	0.28 UJ	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.12 J	0.084 J	1.2 J	0.28 UJ	0.28 U
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.0075 J	0.011 J	0.51 J	0.28 UJ	0.28 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.098 J	0.09 J	3.1	0.28 UJ	0.28 U
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.21 J	0.18 J	3.2	0.28 UJ	0.28 U
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	2.3	2.2	5.4	1.2	1.0
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	17.8	13.7	91.1	7.4	3.7
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.21		2.3	0.086 U	0.085 U
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	**26.0**[ac]	12.1	**341**[abcf]	4.8	4.2
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	8.6	6.8	75.2	1.8	1.9
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.016 J	0.022 J	0.017 J	0.043 U	0.042 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.43 U	0.43 U	**0.60**[ac]	0.43 U	0.42 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.43 U	0.43 U	**3.0**[ac]	0.43 U	0.42 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SB19-05***	***SB20-05***	***SB20-05***	***SB20-05***	***SB20-05***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***SO-17360-121205-DCR-617***	***SO-17360-121205-DCR-607***	***SO-17360-121205-DCR-608***	***SO-17360-121205-DCR-609***	***SO-17360-121205-DCR-610***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Type		a	b	c	d	e	f	g	h	i	j	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.29 U	1.5 J	0.71 J	14 U	16 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.29 U	2.3 J	1.3 J	14 U	16 U
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.29 U	2.1 J	5.7 U	14 U	16 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.29 U	9 J	2.9 J	14 U	16 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	29	8.8	14 U	16 U
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.29 U	**28[f]**	**8.4[f]**	14 U	16 U
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.29 U	38	12	14 U	16 U
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.29 U	21	6.3	14 U	16 U
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.29 U	14 J	4.4 J	14 U	16 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.29 U	32	12	14 U	16 U
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.29 U	6.2 J	1.9 J	14 U	16 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.29 U	**49[c]**	**17[c]**	14 U	16 U
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.29 U	3.5 J	1.5 J	14 U	16 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	17	5.2 J	14 U	16 U
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.29 U	**2.6 J[c]**	**0.91 J[c]**	14 U	16 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.29 U	**30[c]**	**14[c]**	14 U	16 U
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.29 U	39	14	14 U	16 U
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	0.68	**18.5[ab]**	4.3	**22.4[ab]**	1.2
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	5.0	**608[ac]**	287	21.6	13.4
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.034 J	**4.5[ac]**	0.39	0.77 J	0.058 J
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	3.8	**577[abcd]**	**49.1[abc]**	**184[abc]**	8.6
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	1.9	575	46.0	24.0	4.7
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.024 J	**0.18[ac]**	0.044	0.044 U	0.047 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.45 U	**1.7[ac]**	0.36 J	4.4 U	0.47 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.45 U	**1.5[ac]**	0.43 U	4.4 U	0.47 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SB20-05***	***SB21-05***	***SB21-05***	***SB21-05***	***SB21-05***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***SO-17360-121205-DCR-611***	***SO-17360-121205-DCR-602***	***SO-17360-121205-DCR-603***	***SO-17360-121205-DCR-604***	***SO-17360-121205-DCR-605***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Type		a	b	c	d	e	f	g	h	i	j	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	5.7 U	0.13 J	11 U	0.078 J	0.35 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	5.7 U	0.18 J	1.9 J	0.18 J	0.043 J
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	5.7 U	0.026 J	11 U	0.017 J	0.35 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	5.7 U	0.57 J	5.2 J	0.54	0.12 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	5.7 U	2.1 J	17	1.9	0.43
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	5.7 U	2 J	**17**[j]	1.7	0.32 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	5.7 U	3 J	24	3	0.52
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	5.7 U	1.3 J	12	1.3	0.25 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	5.7 U	0.82 J	8.9 J	1	0.12 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	5.7 U	2.6 J	21	2.6	0.49
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	5.7 U	0.43 J	3.4 J	0.49	0.35 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	5.7 U	3.1 J	**37**[c]	3.2	0.81
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	5.7 U	0.26 J	2.2 J	0.23 J	0.047 J
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	5.7 U	1.1 J	10 J	1.2	0.21 J
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	5.7 U	0.092 J	11 U	0.27 J	0.35 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	5.7 U	2.2 J	**23**[c]	2.4	0.63
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	5.7 U	2.6 J	29	2.5	0.64
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	0.73	5.3	2.6	**23.7**[ab]	5.8
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	4.7	66.4	81.3	**472**[ac]	175
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.086 U	0.56	0.41	**7.8**[abc]	2.5
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	5.9	**24.5**[ac]	**21.4**[ac]	**2800**[abcl]	**768**[abcl]
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900		39.6	235	**5410**[abcj]	371
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.043 U	0.033 J	0.028 J	0.015 J	0.024 J
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.43 U	**0.48**[ac]	0.43 U	4.5 U	**0.77**[ac]
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.43 U	0.43 U	0.43 U	**15.3**[abc]	**5.2**[ac]

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																
							Michigan Act 451, Part 201 Industrial and Commercial II, III, IV [1]					***SB21-05***	***SB22-05***	***SB22-05***	***SB22-05***	***SB22-05***
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SO-17360-121205-DCR-606***	***SO-17360-121205-DCR-597***	***SO-17360-121205-DCR-598***	***SO-17360-121205-DCR-599***	***SO-17360-121205-DCR-600***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***	***6-8 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j					
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.29 U	0.086 J	0.079 J	1.4 U	1.4 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.29 U	0.28 U	0.3 U	1.4 U	1.4 U
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.29 U	0.01 J	0.3 U	1.4 U	1.4 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.29 U	0.0099 J	0.0098 J	1.4 U	1.4 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.012 J	0.047 J	0.047 J	1.4 U	1.4 U
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.012 J	0.049 J	0.045 J	1.4 U	1.4 U
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.015 J	0.087 J	0.081 J	1.4 U	1.4 U
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.29 U	0.046 J	0.045 J	1.4 U	1.4 U
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.29 U	0.022 J	0.022 J	1.4 U	1.4 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.013 J	0.08 J	0.079 J	1.4 U	1.4 U
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.29 U	0.013 J	0.013 J	1.4 U	1.4 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.024 J	0.078 J	0.082 J	1.4 U	1.4 U
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.29 U	0.28 U	0.3 U	1.4 U	1.4 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	0.033 J	0.032 J	1.4 U	1.4 U
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.29 U	0.042 J	0.036 J	1.4 U	1.4 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.02 J	0.1 J	0.1 J	1.4 U	1.4 U
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.019 J	0.065 J	0.067 J	1.4 U	1.4 U
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	1.2	2.9	3.2	0.72	1.8
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	14.5	88.0	64.8	8.1	9.4
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.087 U	0.58	0.37	0.086 U	0.087 U
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	8.4	15.1	13.2	3.9	9.2
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	4.0	24.8	17.5	2.9	3.0
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.043 U	0.043 U	0.046 U	0.043 U	0.044 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.43 U	0.43 U	0.46 U	0.43 U	0.44 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.43 U	0.43 U	0.46 U	0.43 U	0.44 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location					*Michigan Act 451, Part 201 Industrial and Commercial II, III, IV* [1]										
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SB22-05***	***SB23-05***	***SB23-05***	***SB23-05***	***SB24-05***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***SO-17360-121205-DCR-601***	***SO-17360-121205-DCR-594***	***SO-17360-121205-DCR-595***	***SO-17360-121205-DCR-596***	***SO-17360-121205-DCR-591***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Type		a	b	c	d	e	f	g	h	i	j	***8-10 ft BGS***	***0-2 ft BGS***	***4-6 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.29 U	0.025 J	0.28 U	0.28 U	0.0082 J
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.29 U	0.28 U	0.28 U	0.28 U	0.012 J
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.29 U	0.28 U	0.28 U	0.28 U	0.035 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	0.021 J	0.28 U	0.28 U	0.12 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.29 U	0.025 J	0.28 U	0.28 U	0.12 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.29 U	0.04 J	0.28 U	0.28 U	0.17 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.29 U	0.02 J	0.28 U	0.28 U	0.09 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.29 U	0.015 J	0.28 U	0.28 U	0.051 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.29 U	0.036 J	0.28 U	0.28 U	0.13 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.29 U	0.28 U	0.28 U	0.28 U	0.022 J
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.29 U	0.04 J	0.28 U	0.28 U	0.28
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.29 U	0.28 U	0.28 U	0.28 U	0.0094 J
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	0.015 J	0.28 U	0.28 U	0.077 J
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.29 U	0.013 J	0.28 U	0.28 U	0.28 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.29 U	0.037 J	0.28 U	0.28 U	0.12 J
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.29 U	0.035 J	0.28 U	0.28 U	0.21 J
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	0.84	1.5	1.0	0.42 U	1.9
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	7.5	33.6	5.7	3.2	13.7
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.037 J	0.13	0.085 U	0.084 U	0.069 J
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	6.2	6.3	5.8	3.0	7.4
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	2.6	7.6	2.0	1.2	5.2
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.044 U	0.042 U	0.042 U	0.042 U	0.042 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.44 U	0.42 U	0.42 U	0.42 U	0.42 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location																
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SB24-05***	***SB24-05***	***SB25-05***	***SB25-05***	***SB25-05***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***SO-17360-121205-DCR-592***	***SO-17360-121205-DCR-593***	***SO-17360-121205-DCR-585***	***SO-17360-121205-DCR-586***	***SO-17360-121205-DCR-587***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Type		a	b	c	d	e	f	g	h	i	j	***4-6 ft BGS***	***8-10 ft BGS***	***0-2 ft BGS***	***2-4 ft BGS***	***4-6 ft BGS***
	Units															
PNAs																
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.29 U	0.28 U	0.09 J	0.035 J	0.28 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.29 U	0.28 U	1.1 J	0.3 U	0.28 U
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.29 U	0.28 U	3.4 U	0.3 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.29 U	0.28 U	2.5 J	0.052 J	0.0082 J
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	0.28 U	6.5	0.44	0.031 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.29 U	0.28 U	6	0.51	0.025 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.29 U	0.28 U	8.6	1.2	0.045 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.29 U	0.28 U	3.9	0.86	0.021 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.29 U	0.28 U	3.2 J	0.33	0.015 J
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.29 U	0.28 U	7.5	0.69	0.037 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.29 U	0.28 U	1.2 J	0.3	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.29 U	0.28 U	**16**[c]	0.79	0.067 J
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.29 U	0.28 U	0.94 J	0.022 J	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.29 U	0.28 U	3.7	0.63	0.017 J
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.29 U	0.28 U	0.17 J	0.089 J	0.28 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.29 U	0.28 U	**10**[c]	0.68	0.041 J
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.29 U	0.28 U	12	0.53	0.047 J
Metals																
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	0.90	0.53	0.64	**29.4**[ab]	1.1
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	6.5	4.6	19.7	**559**[ac]	14.8
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.086 U	0.085 U	0.051 J	**38.1**[abc]	0.10
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	4.8	3.3	14.4	**4970**[abcl]	**46.3**[abc]
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	1.6	0.99	50.9	**3710**[abcj]	18.5
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.043 U	0.043 U	0.041 U	0.045 U	0.043 U
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.43 U	0.43 U	0.41 U	9.1 U	0.43 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.43 U	0.43 U	0.41 U	**31.1**[abc]	0.43 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS IN SOIL SAMPLES COMPARED TO MICHIGAN ACT 451, PART 201 INDUSTRIAL CRITERIA
GENERAL MOTORS CORPORATION
GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location														
							Michigan Act 451, Part 201 Industrial and Commercial II, III, IV [1]					***SB25-05***	***SB25-05***	***SB25-05***
Sample Identification		Statewide	Industrial and	Groundwater	Groundwater	Soil Volatilization	Infinite Source	Finite VSIC for	Finite VSIC for	Particulate	Direct Contact	***SO-17360-121205-DCR-588***	***SO-17360-121205-DCR-589***	***SO-17360-121205-DCR-590***
Sample Date		Default	Commercial	Surface Water	Contact	to Indoor Air	Volatile Soil	5 Meter Source	2 Meter Source	Soil Inhalation	Industrial and	***12/12/2005***	***12/12/2005***	***12/12/2005***
Sample Depth		Background	Drinking Water	Interface Protection	Protection	Inhalation	Inhalation	Thickness	Thickness		Commercial II	***6-8 ft BGS***	***6-8 ft BGS***	***8-10 ft BGS***
Sample Type		a	b	c	d	e	f	g	h	i	j		***Duplicate***	
	Units													
PNAs														
2-Methylnaphthalene	mg/kg		170	ID	5500	ID	ID	ID	ID	ID	26000	0.28 U	0.28 U	0.28 U
Acenaphthene	mg/kg		880	4.4	970	350000	97000	97000	97000	6200000	130000	0.28 U	0.28 U	0.28 U
Acenaphthylene	mg/kg		17	ID	440	3000	2700	2700	2700	1000000	5200	0.28 U	0.28 U	0.28 U
Anthracene	mg/kg		41	ID	41	1000000	1600000	1600000	1600000	29000000	730000	0.28 U	0.0076 J	0.28 U
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.021 J	0.032 J	0.013 J
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	1900	8	0.015 J	0.026 J	0.0099 J
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	80	0.026 J	0.038 J	0.015 J
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	350000	7000	0.011 J	0.017 J	0.0072 J
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	800	0.0092 J	0.018 J	0.28 U
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	8000	0.024 J	0.033 J	0.014 J
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8	0.28 U	0.28 U	0.28 U
Fluoranthene	mg/kg		730	5.5	730	1000000	890000	880000	880000	4100000	130000	0.046 J	0.068 J	0.026 J
Fluorene	mg/kg		890	5.3	890	1000000	150000	150000	150000	4100000	87000	0.28 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80	0.0095 J	0.016 J	0.28 U
Naphthalene	mg/kg		100	0.87	2100	470	350	350	350	88000	52000	0.28 U	0.28 U	0.28 U
Phenanthrene	mg/kg		160	5.3	1100	5100	190	190	190	2900	5200	0.033 J	0.044 J	0.016 J
Pyrene	mg/kg		480	ID	480	1000000	780000	780000	780000	2900000	84000	0.034 J	0.047 J	0.019 J
Metals														
Arsenic	mg/kg	5.8	4.6	70	2000	NLV	NLV	NLV	NLV	910	37	1.6	1.2	0.80
Barium	mg/kg	75	1300	440	1000000	NLV	NLV	NLV	NLV	150000	130000	6.4	4.3	6.6
Cadmium	mg/kg	1.2	6	3	230000	NLV	NLV	NLV	NLV	2200	2100	0.057 J	0.084 U	0.037 J
Chromium Total	mg/kg	18NA	30	3.3	140000	NLV	NLV	NLV	NLV	240	9200	12.0	11.1	9.3
Lead	mg/kg	21	700	2500	ID	NLV	NLV	NLV	NLV	44000	900	10.3	4.6	5.6
Mercury	mg/kg	0.13	1.7	0.1	47	89	62	62	62	8800	580	0.042 U	0.017 J	0.020 J
Selenium	mg/kg	0.41	4	0.4	78000	NLV	NLV	NLV	NLV	59000	9600	0.42 U	0.42 U	0.43 U
Silver	mg/kg	1	13	0.1	200000	NLV	NLV	NLV	NLV	2900	9000	0.42 U	0.42 U	0.43 U

ATTACHMENT A

WASTE CHARACTERIZATION ANALYTICAL DATA

Analytical Laboratory Report

Revised Report

Report ID: S20002.01(02)
Generated on 12/16/2004

Report to

Attention: Tony Feliciano
GM MFD Grand Rapids
300 36th St. SW
Grand Rapids, MI 49548

Phone: 616-246-2992 FAX: 616-246-2896

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S20002.01
Project: Containment Area Soil
Submitted Date/Time: 11/30/2004 15:00
Sampled by: TG
P.O. #: WFB00013

Report Notes

Results relate only to items tested.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RDL.

Violetta F. Murshak
Laboratory Director

Merit Laboratories, Inc.

Analytical Laboratory Report

Revised Report

Lab Sample ID: S20002.01
Sample Tag: Containmnet Area Soil
Collected Date/Time: 11/29/2004
Matrix: Soil
COC Reference: 022999

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	32 oz Glass	None	Yes	4	3

Analysis	Results	Units	RDL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Mercury Digestion	Completed			7470A	12/03/04 10:00	JRT		
Metal Digestion	Completed			3050B	12/09/04 14:00	SLS		
Metal Digestion	Completed			3015A	12/02/04 15:00	SLS		
PNA Extraction	Completed			3550B	12/09/04 17:14	PL		
Oil & Grease n-Hexane Extract.	268	mg/kg	10	1664A	12/06/04 17:17	TAS		
TCLP Extraction								
% Solids	100			1311	12/02/04 13:00	LBR		
Sample Used g	100			1311	12/02/04 13:00	LBR		
Final Volume mL	2,000			1311	12/02/04 13:00	LBR		
Final Extract pH	5.77			1311	12/02/04 13:00	LBR		
Inorganics								
Total Solids	91	%	1	160.3	12/09/04 13:30	PCS		
Metals								
Arsenic, TCLP	Not detected	mg/L	0.02	200.8	12/02/04 17:12	SLS	5.0	
Barium, TCLP	1.89	mg/L	0.05	200.8	12/02/04 17:12	SLS	100.0	
Cadmium, TCLP	0.351	mg/L	0.005	200.8	12/02/04 17:12	SLS	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	200.8	12/02/04 17:12	SLS	5.0	
Copper, TCLP	0.85	mg/L	0.05	200.8	12/02/04 17:12	SLS		
Lead, TCLP	12.5	mg/L	0.03	200.8	12/02/04 17:12	SLS	5.0	!
Lead, TCLP (Replicate 01)	12.8	mg/L	0.003	200.8	12/09/04 15:27	SLS	5.0	!
Mercury, TCLP	Not detected	mg/L	0.0002	245.1M	12/03/04 14:27	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	200.8	12/02/04 17:12	SLS	1.0	
Silver, TCLP	Not detected	mg/L	0.005	200.8	12/02/04 17:12	SLS	5.0	
Zinc, TCLP	5.34	mg/L	0.05	200.8	12/02/04 17:12	SLS		
Lead	146	mg/kg	0.50	6020	12/09/04 15:41	SLS		
Organics								
Gasoline	Not detected	ug/kg	5,000	Vol-8015M	12/12/04 22:55	JGH		
TPH DRO (C10-C32)								
Diesel	10,000	ug/kg	10,000	SV-8015M	12/10/04 21:35	ARH		X
TPH-Other	20,000	ug/kg		SV-8015M	12/10/04 21:35	ARH		

!-Result is outside of regulatory limits
X-Elevated reporting limit due to matrix interference

ATTACHMENT B

STRATIGRAPHIC SOIL BORING LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB19-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	674.51					
	CONCRETE		CONCRETE				
		673.31					
2	SM-SANDS, with silts, trace fine gravels, loose, fine to coarse grained, poorly graded, dark brown, moist		4-1/4" BOREHOLE				
4	- medium brown at 2.0ft BGS - rust/black discoloration to soils at 3.5ft BGS - orange at 4.0ft BGS						
6	- medium brown, trace orange streaking at 5.8ft BGS						
8			BENTONITE CHIPS				
10	END OF BOREHOLE @ 10.0ft BGS	664.51					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB20-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	673.75					
	CONCRETE		CONCRETE				
		672.55					
2	SM-SANDS, with silts, trace fine gravels, loose, fine to coarse grained, poorly graded, dark brown to black, moist		4-1/4" BOREHOLE				
	- trace concrete debris at 2.5ft BGS						
4	- rust brown and red at 4.3ft BGS						
6	- dark brown to medium brown at 6.5ft BGS		BENTONITE CHIPS				
8	- fine to medium grained, medium brown at 8.0ft BGS						
10	END OF BOREHOLE @ 10.0ft BGS	663.75					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB21-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	673.82					
0	CONCRETE		CONCRETE				
		672.62					
2	SM-SANDS, with silts, trace fine gravels, loose, fine to coarse grained, poorly graded, dark brown to black, moist		4-1/4" BOREHOLE				
	- light brown at 3.5ft BGS						
4	- dark brown to black at 4.0ft BGS						
6			BENTONITE CHIPS				
8	- trace coarse grained, fine to medium grained, medium brown at 8.5ft BGS						
10	END OF BOREHOLE @ 10.0ft BGS	663.82					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17360-10.GPJ CRA_CORP.GDT 3/9/06

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB22-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	673.75					
0	CONCRETE		CONCRETE				
		672.55					
2	SM-SANDS, with silts, trace medium grained to fine grained, loose, fine grained, poorly graded, dark brown, moist						
4	- fine to coarse grained, dark brown to black at 3.5ft BGS - trace medium to coarse grained, fine grained, light brown at 4.5ft BGS		4-1/4" BOREHOLE				
6	- fine to coarse grained, medium brown, trace orange streaking at 6.5ft BGS						
8	- light brown to beige at 8.0ft BGS		BENTONITE CHIPS				
10	END OF BOREHOLE @ 10.0ft BGS	663.75					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB23-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	673.95					
0	CONCRETE		CONCRETE				
		672.75					
2	SM-SANDS, with silts, trace medium grained to fine gravels, loose, fine grained, poorly graded, dark brown, moist		4-1/4" BOREHOLE				
4	- orange brown to dark brown at 2.5ft BGS						
6	- light brown, some orange streaking at 6.0ft BGS		BENTONITE CHIPS				
8							
10	END OF BOREHOLE @ 10.0ft BGS	663.95					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17360-10.GPJ CRA_CORP.GDT 3/9/06

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB24-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	675.36					
0	CONCRETE		CONCRETE				
		674.16					
2	SM-SANDS, with silts, loose, fine grained, medium grained to fine gravels, poorly graded, brown, moist		4-1/4" BOREHOLE				
4	- fine to medium grained, trace coarse grained, orange brown at 4.5ft BGS						
6	- light brown at 6.0ft BGS		BENTONITE CHIPS				
8							
10	END OF BOREHOLE @ 10.0ft BGS	665.36					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: GM GRAND RAPIDS
PROJECT NUMBER: 17360-10
CLIENT: GENERAL MOTORS
LOCATION: GRAND RAPIDS, MI

HOLE DESIGNATION: SB25-05
DATE COMPLETED: December 12, 2005
DRILLING METHOD: 4-1/4" HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE
	GROUND SURFACE	674.41					
0	CONCRETE		CONCRETE				
	SM-SANDS, with silts, trace medium sands to fine gravels, compact, fine grained, poorly graded, light brown, moist,	673.21					
2	- rust colored at 3.0ft BGS						
4	- brown and red at 3.3ft BGS		4-1/4" BOREHOLE				
	- trace medium grained, trace coarse grained, orange brown at 4.3ft BGS						
6							
8			BENTONITE CHIPS				
	- light brown at 8.5ft BGS						
10	END OF BOREHOLE @ 10.0ft BGS	664.41					
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG 17360-10.GPJ CRA_CORP.GDT 3/9/06

ATTACHMENT C

LABORATORY ANALYTICAL DATA

Table of Contents

Return to Navigator

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 17360-10

GM-GRAND RAPIDS SSOW# E030002

Lot #: A5L140222
SDG #: 5L14222

Paul Wiseman (PM)

Conestoga Rovers & Assoc., Inc
14496 Sheldon Rd Suite 200
Plymouth, MI 48170

SEVERN TRENT LABORATORIES, INC.

Denise D. Heckler DA
Denise D. Heckler
Project Manager

December 29, 2005

CASE NARRATIVE

CASE NARRATIVE

5L14222

The following report contains the analytical results for thirty-three solid samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the GM-Grand Rapids SSOW# E030002 Site, project number 17360-10. The samples were received December 14, 2005, according to documented sample acceptance procedures.

This SDG consists of (1) laboratory ID's: A5L140222.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Denise D. Heckler, at 734-205-2535.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 2.3°C.

CASE NARRATIVE (continued)

GC/MS SEMIVOLATILES

Result concentration exceeds the calibration range. Refer to the sample report pages for the affected compound(s) flagged with "E".

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

Sample(s) SO-17360-121205-DCR-602 and SO-17360-121205-DCR-615 had up to one surrogate recovery per fraction outside acceptance limits. However, since the recovery was greater than 10% and all associated QC met criteria, no corrective action was taken.

Two analyses were used to report sample(s) SO-17360-121205-DCR-602 and SO-17360-121205-DCR-604 due to high analyte concentrations.

Sample(s) SO-17360-121205-DCR-599, SO-17360-121205-DCR-600, SO-17360-121205-DCR-608, SO-17360-121205-DCR-609, SO-17360-121205-DCR-610, SO-17360-121205-DCR-611, and SO-17360-121205-DCR-614 had elevated reporting limits due to matrix interference.

Sample(s) SO-17360-121205-DCR-590 was double surrogated. Adjustments were made accordingly.

Due to inherent matrix effects, sample(s) SO-17360-121205-DCR-608 could not be concentrated to the final method required volume. Since this was an effective dilution, the final reporting limits were adjusted proportionately.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive of mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

CASE NARRATIVE (continued)

METALS (continued)

Some reporting limits are lower than our standard reporting limit (SRL) but are supported by the laboratory's MDL and/or IDLs; however, there are no standards in the calibration curve low enough to support these value(s). The continuing calibration blanks and method blanks may not support the lower RL.

No ICP Trace Form IX was provided for batch(es) 5349026. The serial dilution was performed on a different sample from the same QC batch(es).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

Y:\Barb\STL headers\Qc846-Narrative_060204.doc, Revised06/02/04 DJL

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-585 12/12/05 10:35 001				
Arsenic	0.64	0.41	mg/kg	SW846 6010B
Barium	19.7	0.81	mg/kg	SW846 6010B
Cadmium	0.051 B	0.081	mg/kg	SW846 6010B
Chromium	14.4	0.41	mg/kg	SW846 6010B
Lead	50.9	0.24	mg/kg	SW846 6010B
Acenaphthene	1100 J	3400	ug/kg	SW846 8270C
Anthracene	2500 J	3400	ug/kg	SW846 8270C
Benzo(a)anthracene	6500	3400	ug/kg	SW846 8270C
Benzo(a)pyrene	6000	3400	ug/kg	SW846 8270C
Benzo(b)fluoranthene	8600	3400	ug/kg	SW846 8270C
Benzo(ghi)perylene	3900	3400	ug/kg	SW846 8270C
Benzo(k)fluoranthene	3200 J	3400	ug/kg	SW846 8270C
Chrysene	7500	3400	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	1200 J	3400	ug/kg	SW846 8270C
Fluoranthene	16000	3400	ug/kg	SW846 8270C
Fluorene	940 J	3400	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	3700	3400	ug/kg	SW846 8270C
2-Methylnaphthalene	90 J	3400	ug/kg	SW846 8270C
Naphthalene	170 J	3400	ug/kg	SW846 8270C
Phenanthrene	10000	3400	ug/kg	SW846 8270C
Pyrene	12000	3400	ug/kg	SW846 8270C
Percent Solids	98.5	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-586 12/12/05 10:40 002				
Silver	31.1	9.1	mg/kg	SW846 6010B
Arsenic	29.4	9.1	mg/kg	SW846 6010B
Barium	559	0.91	mg/kg	SW846 6010B
Cadmium	38.1	1.8	mg/kg	SW846 6010B
Chromium	4970	9.1	mg/kg	SW846 6010B
Lead	3710	5.4	mg/kg	SW846 6010B
Anthracene	52 J	300	ug/kg	SW846 8270C
Benzo(a)anthracene	440	300	ug/kg	SW846 8270C
Benzo(a)pyrene	510	300	ug/kg	SW846 8270C
Benzo(b)fluoranthene	1200	300	ug/kg	SW846 8270C
Benzo(ghi)perylene	860	300	ug/kg	SW846 8270C
Benzo(k)fluoranthene	330	300	ug/kg	SW846 8270C
Chrysene	690	300	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	300	300	ug/kg	SW846 8270C
Fluoranthene	790	300	ug/kg	SW846 8270C
Fluorene	22 J	300	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	630	300	ug/kg	SW846 8270C
2-Methylnaphthalene	35 J	300	ug/kg	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-586 12/12/05 10:40 002				
Naphthalene	89 J	300	ug/kg	SW846 8270C
Phenanthrene	680	300	ug/kg	SW846 8270C
Pyrene	530	300	ug/kg	SW846 8270C
Percent Solids	88.1	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-587 12/12/05 10:45 003				
Arsenic	1.1	0.43	mg/kg	SW846 6010B
Barium	14.8	0.86	mg/kg	SW846 6010B
Cadmium	0.10	0.086	mg/kg	SW846 6010B
Chromium	46.3	0.43	mg/kg	SW846 6010B
Lead	18.5	0.26	mg/kg	SW846 6010B
Anthracene	8.2 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	31 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	25 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	45 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	21 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	15 J	280	ug/kg	SW846 8270C
Chrysene	37 J	280	ug/kg	SW846 8270C
Fluoranthene	67 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	17 J	280	ug/kg	SW846 8270C
Phenanthrene	41 J	280	ug/kg	SW846 8270C
Pyrene	47 J	280	ug/kg	SW846 8270C
Percent Solids	93.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-588 12/12/05 10:47 004				
Arsenic	1.6	0.42	mg/kg	SW846 6010B
Barium	6.4	0.85	mg/kg	SW846 6010B
Cadmium	0.057 B	0.085	mg/kg	SW846 6010B
Chromium	12.0	0.42	mg/kg	SW846 6010B
Lead	10.3	0.25	mg/kg	SW846 6010B
Benzo(a)anthracene	21 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	15 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	26 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	11 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	9.2 J	280	ug/kg	SW846 8270C
Chrysene	24 J	280	ug/kg	SW846 8270C
Fluoranthene	46 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	9.5 J	280	ug/kg	SW846 8270C
Phenanthrene	33 J	280	ug/kg	SW846 8270C
Pyrene	34 J	280	ug/kg	SW846 8270C
Percent Solids	94.5	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-589 12/12/05 10:50 005				
Mercury	0.017 B	0.042	mg/kg	SW846 7471A
Arsenic	1.2	0.42	mg/kg	SW846 6010B
Barium	4.3	0.84	mg/kg	SW846 6010B
Chromium	11.1	0.42	mg/kg	SW846 6010B
Lead	4.6	0.25	mg/kg	SW846 6010B
Anthracene	7.6 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	32 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	26 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	38 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	17 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	18 J	280	ug/kg	SW846 8270C
Chrysene	33 J	280	ug/kg	SW846 8270C
Fluoranthene	68 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	16 J	280	ug/kg	SW846 8270C
Phenanthrene	44 J	280	ug/kg	SW846 8270C
Pyrene	47 J	280	ug/kg	SW846 8270C
Percent Solids	95.4	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-590 12/12/05 10:55 006				
Mercury	0.020 B	0.043	mg/kg	SW846 7471A
Arsenic	0.80	0.43	mg/kg	SW846 6010B
Barium	6.6	0.85	mg/kg	SW846 6010B
Cadmium	0.037 B	0.085	mg/kg	SW846 6010B
Chromium	9.3	0.43	mg/kg	SW846 6010B
Lead	5.6	0.26	mg/kg	SW846 6010B
Benzo(a)anthracene	13 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	9.9 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	15 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	7.2 J	280	ug/kg	SW846 8270C
Chrysene	14 J	280	ug/kg	SW846 8270C
Fluoranthene	26 J	280	ug/kg	SW846 8270C
Phenanthrene	16 J	280	ug/kg	SW846 8270C
Pyrene	19 J	280	ug/kg	SW846 8270C
Percent Solids	93.6	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-591 12/12/05 11:35 007				
Arsenic	1.9	0.42	mg/kg	SW846 6010B
Barium	13.7	0.83	mg/kg	SW846 6010B
Cadmium	0.069 B	0.083	mg/kg	SW846 6010B
Chromium	7.4	0.42	mg/kg	SW846 6010B
Lead	5.2	0.25	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-591 12/12/05 11:35 007				
Acenaphthene	12 J	280	ug/kg	SW846 8270C
Anthracene	35 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	120 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	120 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	170 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	90 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	51 J	280	ug/kg	SW846 8270C
Chrysene	130 J	280	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	22 J	280	ug/kg	SW846 8270C
Fluoranthene	280	280	ug/kg	SW846 8270C
Fluorene	9.4 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	77 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	8.2 J	280	ug/kg	SW846 8270C
Phenanthrene	120 J	280	ug/kg	SW846 8270C
Pyrene	210 J	280	ug/kg	SW846 8270C
Percent Solids	96.0	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-592 12/12/05 11:40 008				
Arsenic	0.90	0.43	mg/kg	SW846 6010B
Barium	6.5	0.86	mg/kg	SW846 6010B
Chromium	4.8	0.43	mg/kg	SW846 6010B
Lead	1.6	0.26	mg/kg	SW846 6010B
Percent Solids	92.5	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-593 12/12/05 11:50 009				
Arsenic	0.53	0.43	mg/kg	SW846 6010B
Barium	4.6	0.85	mg/kg	SW846 6010B
Chromium	3.3	0.43	mg/kg	SW846 6010B
Lead	0.99	0.26	mg/kg	SW846 6010B
Percent Solids	93.8	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-594 12/12/05 12:20 010				
Arsenic	1.5	0.42	mg/kg	SW846 6010B
Barium	33.6	0.85	mg/kg	SW846 6010B
Cadmium	0.13	0.085	mg/kg	SW846 6010B
Chromium	6.3	0.42	mg/kg	SW846 6010B
Lead	7.6	0.25	mg/kg	SW846 6010B
Benzo(a)anthracene	21 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	25 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	40 J	280	ug/kg	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-594 12/12/05 12:20 010				
Benzo(ghi)perylene	20 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	15 J	280	ug/kg	SW846 8270C
Chrysene	36 J	280	ug/kg	SW846 8270C
Fluoranthene	40 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	15 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	25 J	280	ug/kg	SW846 8270C
Naphthalene	13 J	280	ug/kg	SW846 8270C
Phenanthrene	37 J	280	ug/kg	SW846 8270C
Pyrene	35 J	280	ug/kg	SW846 8270C
Percent Solids	94.4	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-595 12/12/05 12:30 011				
Arsenic	1.0	0.42	mg/kg	SW846 6010B
Barium	5.7	0.85	mg/kg	SW846 6010B
Chromium	5.8	0.42	mg/kg	SW846 6010B
Lead	2.0	0.25	mg/kg	SW846 6010B
Percent Solids	94.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-596 12/12/05 12:35 012				
Barium	3.2	0.84	mg/kg	SW846 6010B
Chromium	3.0	0.42	mg/kg	SW846 6010B
Lead	1.2	0.25	mg/kg	SW846 6010B
Percent Solids	95.5	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-597 12/12/05 13:30 013				
Arsenic	2.9	0.43	mg/kg	SW846 6010B
Barium	88.0	0.86	mg/kg	SW846 6010B
Cadmium	0.58	0.086	mg/kg	SW846 6010B
Chromium	15.1	0.43	mg/kg	SW846 6010B
Lead	24.8	0.26	mg/kg	SW846 6010B
Acenaphthylene	10 J	280	ug/kg	SW846 8270C
Anthracene	9.9 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	47 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	49 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	87 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	46 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	22 J	280	ug/kg	SW846 8270C
Chrysene	80 J	280	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	13 J	280	ug/kg	SW846 8270C
Fluoranthene	78 J	280	ug/kg	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-597 12/12/05 13:30 013				
Indeno(1,2,3-cd)pyrene	33 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	86 J	280	ug/kg	SW846 8270C
Naphthalene	42 J	280	ug/kg	SW846 8270C
Phenanthrene	100 J	280	ug/kg	SW846 8270C
Pyrene	65 J	280	ug/kg	SW846 8270C
Percent Solids	93.0	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-598 12/12/05 13:40 014				
Arsenic	3.2	0.46	mg/kg	SW846 6010B
Barium	64.8	0.91	mg/kg	SW846 6010B
Cadmium	0.37	0.091	mg/kg	SW846 6010B
Chromium	13.2	0.46	mg/kg	SW846 6010B
Lead	17.5	0.27	mg/kg	SW846 6010B
Anthracene	9.8 J	300	ug/kg	SW846 8270C
Benzo(a)anthracene	47 J	300	ug/kg	SW846 8270C
Benzo(a)pyrene	45 J	300	ug/kg	SW846 8270C
Benzo(b)fluoranthene	81 J	300	ug/kg	SW846 8270C
Benzo(ghi)perylene	45 J	300	ug/kg	SW846 8270C
Benzo(k)fluoranthene	22 J	300	ug/kg	SW846 8270C
Chrysene	79 J	300	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	13 J	300	ug/kg	SW846 8270C
Fluoranthene	82 J	300	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	32 J	300	ug/kg	SW846 8270C
2-Methylnaphthalene	79 J	300	ug/kg	SW846 8270C
Naphthalene	36 J	300	ug/kg	SW846 8270C
Phenanthrene	100 J	300	ug/kg	SW846 8270C
Pyrene	67 J	300	ug/kg	SW846 8270C
Percent Solids	87.6	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-599 12/12/05 13:45 015				
Arsenic	0.72	0.43	mg/kg	SW846 6010B
Barium	8.1	0.86	mg/kg	SW846 6010B
Chromium	3.9	0.43	mg/kg	SW846 6010B
Lead	2.9	0.26	mg/kg	SW846 6010B
Percent Solids	93.1	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-600 12/12/05 13:50 016				
Arsenic	1.8	0.44	mg/kg	SW846 6010B
Barium	9.4	0.87	mg/kg	SW846 6010B
Chromium	9.2	0.44	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-600 12/12/05 13:50 016				
Lead	3.0	0.26	mg/kg	SW846 6010B
Percent Solids	91.6	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-601 12/12/05 13:55 017				
Arsenic	0.84	0.44	mg/kg	SW846 6010B
Barium	7.5	0.87	mg/kg	SW846 6010B
Cadmium	0.037 B	0.087	mg/kg	SW846 6010B
Chromium	6.2	0.44	mg/kg	SW846 6010B
Lead	2.6	0.26	mg/kg	SW846 6010B
Percent Solids	91.6	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-602 12/12/05 14:25 018				
Mercury	0.033 B	0.043	mg/kg	SW846 7471A
Arsenic	5.3	0.43	mg/kg	SW846 6010B
Barium	66.4	0.86	mg/kg	SW846 6010B
Cadmium	0.56	0.086	mg/kg	SW846 6010B
Chromium	24.5	0.43	mg/kg	SW846 6010B
Lead	39.6	0.26	mg/kg	SW846 6010B
Selenium	0.48	0.43	mg/kg	SW846 6010B
Acenaphthene	180 J	280	ug/kg	SW846 8270C
Acenaphthene	170 J	710	ug/kg	SW846 8270C
Acenaphthylene	26 J	280	ug/kg	SW846 8270C
Anthracene	570	280	ug/kg	SW846 8270C
Anthracene	530 J	710	ug/kg	SW846 8270C
Benzo(a)anthracene	2100 E	280	ug/kg	SW846 8270C
Benzo(a)anthracene	2100	710	ug/kg	SW846 8270C
Benzo(a)pyrene	1800 E	280	ug/kg	SW846 8270C
Benzo(a)pyrene	2000	710	ug/kg	SW846 8270C
Benzo(b)fluoranthene	2700 E	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	3000	710	ug/kg	SW846 8270C
Benzo(ghi)perylene	1300	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	1300	710	ug/kg	SW846 8270C
Benzo(k)fluoranthene	820	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	950	710	ug/kg	SW846 8270C
Chrysene	2500 E	280	ug/kg	SW846 8270C
Chrysene	2600	710	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	430	280	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	450 J	710	ug/kg	SW846 8270C
Fluoranthene	2900 E	280	ug/kg	SW846 8270C
Fluoranthene	3100	710	ug/kg	SW846 8270C
Fluorene	260 J	280	ug/kg	SW846 8270C

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-602 12/12/05 14:25 018				
Fluorene	250 J	710	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	1100	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	1100	710	ug/kg	SW846 8270C
2-Methylnaphthalene	130 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	110 J	710	ug/kg	SW846 8270C
Naphthalene	92 J	280	ug/kg	SW846 8270C
Naphthalene	83 J	710	ug/kg	SW846 8270C
Phenanthrene	2000 E	280	ug/kg	SW846 8270C
Phenanthrene	2200	710	ug/kg	SW846 8270C
Pyrene	2600 E	280	ug/kg	SW846 8270C
Pyrene	2600	710	ug/kg	SW846 8270C
Percent Solids	93.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-603 12/12/05 14:30 019				
Mercury	0.028 B	0.043	mg/kg	SW846 7471A
Arsenic	2.6	0.43	mg/kg	SW846 6010B
Barium	81.3	0.86	mg/kg	SW846 6010B
Cadmium	0.41	0.086	mg/kg	SW846 6010B
Chromium	21.4	0.43	mg/kg	SW846 6010B
Lead	235	0.26	mg/kg	SW846 6010B
Acenaphthene	1900 J	11000	ug/kg	SW846 8270C
Anthracene	5200 J	11000	ug/kg	SW846 8270C
Benzo(a)anthracene	17000	11000	ug/kg	SW846 8270C
Benzo(a)pyrene	17000	11000	ug/kg	SW846 8270C
Benzo(b)fluoranthene	24000	11000	ug/kg	SW846 8270C
Benzo(ghi)perylene	12000	11000	ug/kg	SW846 8270C
Benzo(k)fluoranthene	8900 J	11000	ug/kg	SW846 8270C
Chrysene	21000	11000	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	3400 J	11000	ug/kg	SW846 8270C
Fluoranthene	37000	11000	ug/kg	SW846 8270C
Fluorene	2200 J	11000	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	10000 J	11000	ug/kg	SW846 8270C
Phenanthrene	23000	11000	ug/kg	SW846 8270C
Pyrene	29000	11000	ug/kg	SW846 8270C
Percent Solids	93.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-604 12/12/05 14:35 020				
Mercury	0.015 B	0.045	mg/kg	SW846 7471A
Silver	15.3	4.5	mg/kg	SW846 6010B
Arsenic	23.7	4.5	mg/kg	SW846 6010B
Barium	472	0.90	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-604 12/12/05 14:35 020				
Cadmium	7.8	0.90	mg/kg	SW846 6010B
Chromium	2800	0.45	mg/kg	SW846 6010B
Lead	5410	2.7	mg/kg	SW846 6010B
Acenaphthene	180 J	300	ug/kg	SW846 8270C
Acenaphthene	160 J	740	ug/kg	SW846 8270C
Acenaphthylene	17 J	300	ug/kg	SW846 8270C
Anthracene	540	300	ug/kg	SW846 8270C
Anthracene	480 J	740	ug/kg	SW846 8270C
Benzo(a)anthracene	2100 E	300	ug/kg	SW846 8270C
Benzo(a)anthracene	1900	740	ug/kg	SW846 8270C
Benzo(a)pyrene	1700	300	ug/kg	SW846 8270C
Benzo(a)pyrene	1700	740	ug/kg	SW846 8270C
Benzo(b)fluoranthene	3000 E	300	ug/kg	SW846 8270C
Benzo(b)fluoranthene	3000	740	ug/kg	SW846 8270C
Benzo(ghi)perylene	1300	300	ug/kg	SW846 8270C
Benzo(ghi)perylene	1300	740	ug/kg	SW846 8270C
Benzo(k)fluoranthene	1000	300	ug/kg	SW846 8270C
Benzo(k)fluoranthene	950	740	ug/kg	SW846 8270C
Chrysene	2800 E	300	ug/kg	SW846 8270C
Chrysene	2600	740	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	490	300	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	470 J	740	ug/kg	SW846 8270C
Fluoranthene	3100 E	300	ug/kg	SW846 8270C
Fluoranthene	3200	740	ug/kg	SW846 8270C
Fluorene	230 J	300	ug/kg	SW846 8270C
Fluorene	210 J	740	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	1200	300	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	1100	740	ug/kg	SW846 8270C
2-Methylnaphthalene	78 J	300	ug/kg	SW846 8270C
2-Methylnaphthalene	70 J	740	ug/kg	SW846 8270C
Naphthalene	270 J	300	ug/kg	SW846 8270C
Naphthalene	240 J	740	ug/kg	SW846 8270C
Phenanthrene	2400 E	300	ug/kg	SW846 8270C
Phenanthrene	2400	740	ug/kg	SW846 8270C
Pyrene	2700 E	300	ug/kg	SW846 8270C
Pyrene	2500	740	ug/kg	SW846 8270C
Percent Solids	89.1	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-605 12/12/05 14:40 021				
Mercury	0.024 B	0.053	mg/kg	SW846 7471A
Silver	5.2	0.53	mg/kg	SW846 6010B
Arsenic	5.8	0.53	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-605 12/12/05 14:40 021				
Barium	175	1.1	mg/kg	SW846 6010B
Cadmium	2.5	0.11	mg/kg	SW846 6010B
Chromium	768	0.53	mg/kg	SW846 6010B
Lead	371	0.32	mg/kg	SW846 6010B
Selenium	0.77	0.53	mg/kg	SW846 6010B
Acenaphthene	43 J	350	ug/kg	SW846 8270C
Anthracene	120 J	350	ug/kg	SW846 8270C
Benzo(a)anthracene	430	350	ug/kg	SW846 8270C
Benzo(a)pyrene	320 J	350	ug/kg	SW846 8270C
Benzo(b)fluoranthene	520	350	ug/kg	SW846 8270C
Benzo(ghi)perylene	250 J	350	ug/kg	SW846 8270C
Benzo(k)fluoranthene	120 J	350	ug/kg	SW846 8270C
Chrysene	490	350	ug/kg	SW846 8270C
Fluoranthene	810	350	ug/kg	SW846 8270C
Fluorene	47 J	350	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	210 J	350	ug/kg	SW846 8270C
Phenanthrene	630	350	ug/kg	SW846 8270C
Pyrene	640	350	ug/kg	SW846 8270C
Percent Solids	74.9	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-606 12/12/05 14:45 022				
Arsenic	1.2	0.43	mg/kg	SW846 6010B
Barium	14.5	0.87	mg/kg	SW846 6010B
Chromium	8.4	0.43	mg/kg	SW846 6010B
Lead	4.0	0.26	mg/kg	SW846 6010B
Benzo(a)anthracene	12 J	290	ug/kg	SW846 8270C
Benzo(a)pyrene	12 J	290	ug/kg	SW846 8270C
Benzo(b)fluoranthene	15 J	290	ug/kg	SW846 8270C
Chrysene	13 J	290	ug/kg	SW846 8270C
Fluoranthene	24 J	290	ug/kg	SW846 8270C
Phenanthrene	20 J	290	ug/kg	SW846 8270C
Pyrene	19 J	290	ug/kg	SW846 8270C
Percent Solids	92.2	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-607 12/12/05 15:25 023				
Mercury	0.18	0.047	mg/kg	SW846 7471A
Silver	1.5	0.47	mg/kg	SW846 6010B
Arsenic	18.5	0.47	mg/kg	SW846 6010B
Barium	608	0.94	mg/kg	SW846 6010B
Cadmium	4.5	0.094	mg/kg	SW846 6010B
Chromium	577	0.47	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-607 12/12/05 15:25 023				
Lead	575	0.28	mg/kg	SW846 6010B
Selenium	1.7	0.47	mg/kg	SW846 6010B
Acenaphthene	2300 J	15000	ug/kg	SW846 8270C
Acenaphthylene	2100 J	15000	ug/kg	SW846 8270C
Anthracene	9000 J	15000	ug/kg	SW846 8270C
Benzo(a)anthracene	29000	15000	ug/kg	SW846 8270C
Benzo(a)pyrene	28000	15000	ug/kg	SW846 8270C
Benzo(b)fluoranthene	38000	15000	ug/kg	SW846 8270C
Benzo(ghi)perylene	21000	15000	ug/kg	SW846 8270C
Benzo(k)fluoranthene	14000 J	15000	ug/kg	SW846 8270C
Chrysene	32000	15000	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	6200 J	15000	ug/kg	SW846 8270C
Fluoranthene	49000	15000	ug/kg	SW846 8270C
Fluorene	3500 J	15000	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	17000	15000	ug/kg	SW846 8270C
2-Methylnaphthalene	1500 J	15000	ug/kg	SW846 8270C
Naphthalene	2600 J	15000	ug/kg	SW846 8270C
Phenanthrene	30000	15000	ug/kg	SW846 8270C
Pyrene	39000	15000	ug/kg	SW846 8270C
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-608 12/12/05 15:30 024				
Mercury	0.044	0.043	mg/kg	SW846 7471A
Arsenic	4.3	0.43	mg/kg	SW846 6010B
Barium	287	0.87	mg/kg	SW846 6010B
Cadmium	0.39	0.087	mg/kg	SW846 6010B
Chromium	49.1	0.43	mg/kg	SW846 6010B
Lead	46.0	0.26	mg/kg	SW846 6010B
Selenium	0.36 B	0.43	mg/kg	SW846 6010B
Acenaphthene	1300 J	5700	ug/kg	SW846 8270C
Anthracene	2900 J	5700	ug/kg	SW846 8270C
Benzo(a)anthracene	8800	5700	ug/kg	SW846 8270C
Benzo(a)pyrene	8400	5700	ug/kg	SW846 8270C
Benzo(b)fluoranthene	12000	5700	ug/kg	SW846 8270C
Benzo(ghi)perylene	6300	5700	ug/kg	SW846 8270C
Benzo(k)fluoranthene	4400 J	5700	ug/kg	SW846 8270C
Chrysene	12000	5700	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	1900 J	5700	ug/kg	SW846 8270C
Fluoranthene	17000	5700	ug/kg	SW846 8270C
Fluorene	1500 J	5700	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	5200 J	5700	ug/kg	SW846 8270C
2-Methylnaphthalene	710 J	5700	ug/kg	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-608 12/12/05 15:30 024				
Naphthalene	910 J	5700	ug/kg	SW846 8270C
Phenanthrene	14000	5700	ug/kg	SW846 8270C
Pyrene	14000	5700	ug/kg	SW846 8270C
Percent Solids	92.4	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-609 12/12/05 15:35 025				
Arsenic	22.4	4.4	mg/kg	SW846 6010B
Barium	21.6	0.87	mg/kg	SW846 6010B
Cadmium	0.77 B,G	0.87	mg/kg	SW846 6010B
Chromium	184	4.4	mg/kg	SW846 6010B
Lead	24.0	2.6	mg/kg	SW846 6010B
Percent Solids	91.5	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-610 12/12/05 15:40 026				
Arsenic	1.2	0.47	mg/kg	SW846 6010B
Barium	13.4	0.94	mg/kg	SW846 6010B
Cadmium	0.058 B	0.094	mg/kg	SW846 6010B
Chromium	8.6	0.47	mg/kg	SW846 6010B
Lead	4.7	0.28	mg/kg	SW846 6010B
Percent Solids	85.2	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-611 12/12/05 15:45 027				
Arsenic	0.73	0.43	mg/kg	SW846 6010B
Barium	4.7	0.86	mg/kg	SW846 6010B
Chromium	5.9	0.43	mg/kg	SW846 6010B
Lead	3.2	0.26	mg/kg	SW846 6010B
Percent Solids	93.2	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-612 12/12/05 16:45 028				
Mercury	0.016 B	0.043	mg/kg	SW846 7471A
Arsenic	2.3	0.43	mg/kg	SW846 6010B
Barium	17.8	0.85	mg/kg	SW846 6010B
Cadmium	0.21	0.085	mg/kg	SW846 6010B
Chromium	26.0	0.43	mg/kg	SW846 6010B
Lead	8.6	0.26	mg/kg	SW846 6010B
Anthracene	23 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	160 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	180 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	230 J	280	ug/kg	SW846 8270C

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-612 12/12/05 16:45 028				
Benzo(ghi)perylene	140 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	70 J	280	ug/kg	SW846 8270C
Chrysene	170 J	280	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	37 J	280	ug/kg	SW846 8270C
Fluoranthene	250 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	120 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	11 J	280	ug/kg	SW846 8270C
Naphthalene	7.5 J	280	ug/kg	SW846 8270C
Phenanthrene	98 J	280	ug/kg	SW846 8270C
Pyrene	210 J	280	ug/kg	SW846 8270C
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-613 12/12/05 16:50 029				
Mercury	0.022 B	0.043	mg/kg	SW846 7471A
Arsenic	2.2	0.43	mg/kg	SW846 6010B
Barium	13.7	0.85	mg/kg	SW846 6010B
Cadmium	0.16	0.085	mg/kg	SW846 6010B
Chromium	12.1	0.43	mg/kg	SW846 6010B
Lead	6.8	0.26	mg/kg	SW846 6010B
Anthracene	23 J	280	ug/kg	SW846 8270C
Benzo(a)anthracene	130 J	280	ug/kg	SW846 8270C
Benzo(a)pyrene	130 J	280	ug/kg	SW846 8270C
Benzo(b)fluoranthene	200 J	280	ug/kg	SW846 8270C
Benzo(ghi)perylene	95 J	280	ug/kg	SW846 8270C
Benzo(k)fluoranthene	71 J	280	ug/kg	SW846 8270C
Chrysene	130 J	280	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	26 J	280	ug/kg	SW846 8270C
Fluoranthene	210 J	280	ug/kg	SW846 8270C
Fluorene	7.3 J	280	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	84 J	280	ug/kg	SW846 8270C
2-Methylnaphthalene	13 J	280	ug/kg	SW846 8270C
Naphthalene	11 J	280	ug/kg	SW846 8270C
Phenanthrene	90 J	280	ug/kg	SW846 8270C
Pyrene	180 J	280	ug/kg	SW846 8270C
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-614 12/12/05 16:55 030				
Mercury	0.017 B	0.044	mg/kg	SW846 7471A
Silver	3.0	0.44	mg/kg	SW846 6010B
Arsenic	5.4	0.44	mg/kg	SW846 6010B
Barium	91.1	0.89	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-614 12/12/05 16:55 030				
Cadmium	2.3	0.089	mg/kg	SW846 6010B
Chromium	341	0.44	mg/kg	SW846 6010B
Lead	75.2	0.27	mg/kg	SW846 6010B
Selenium	0.60	0.44	mg/kg	SW846 6010B
Acenaphthene	370 J	2900	ug/kg	SW846 8270C
Anthracene	750 J	2900	ug/kg	SW846 8270C
Benzo(a)anthracene	2000 J	2900	ug/kg	SW846 8270C
Benzo(a)pyrene	1900 J	2900	ug/kg	SW846 8270C
Benzo(b)fluoranthene	2400 J	2900	ug/kg	SW846 8270C
Benzo(ghi)perylene	1400 J	2900	ug/kg	SW846 8270C
Benzo(k)fluoranthene	1100 J	2900	ug/kg	SW846 8270C
Chrysene	2200 J	2900	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	340 J	2900	ug/kg	SW846 8270C
Fluoranthene	4200	2900	ug/kg	SW846 8270C
Fluorene	430 J	2900	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	1200 J	2900	ug/kg	SW846 8270C
2-Methylnaphthalene	470 J	2900	ug/kg	SW846 8270C
Naphthalene	510 J	2900	ug/kg	SW846 8270C
Phenanthrene	3100	2900	ug/kg	SW846 8270C
Pyrene	3200	2900	ug/kg	SW846 8270C
Percent Solids	90.2	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-615 12/12/05 17:00 031				
Arsenic	1.2	0.43	mg/kg	SW846 6010B
Barium	7.4	0.86	mg/kg	SW846 6010B
Chromium	4.8	0.43	mg/kg	SW846 6010B
Lead	1.8	0.26	mg/kg	SW846 6010B
Fluoranthene	9.0 J	280	ug/kg	SW846 8270C
Percent Solids	93.3	10.0	%	MCAWW 160.3 MOD
SO-17360-121205-DCR-616 12/12/05 17:02 032				
Arsenic	1.0	0.42	mg/kg	SW846 6010B
Barium	3.7	0.85	mg/kg	SW846 6010B
Chromium	4.2	0.42	mg/kg	SW846 6010B
Lead	1.9	0.25	mg/kg	SW846 6010B
Percent Solids	94.7	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

5L14222 : A5L140222

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SO-17360-121205-DCR-617 12/12/05 17:05 033				
Mercury	0.024 B	0.045	mg/kg	SW846 7471A
Arsenic	0.68	0.45	mg/kg	SW846 6010B
Barium	5.0	0.89	mg/kg	SW846 6010B
Cadmium	0.034 B	0.089	mg/kg	SW846 6010B
Chromium	3.8	0.45	mg/kg	SW846 6010B
Lead	1.9	0.27	mg/kg	SW846 6010B
Percent Solids	89.8	10.0	%	MCAWW 160.3 MOD

METHOD SUMMARY

ANALYTICAL METHODS SUMMARY

5L14222

PARAMETER	ANALYTICAL METHOD
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

SAMPLE SUMMARY

5L14222 : A5L140222

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HR36E	001	SO-17360-121205-DCR-585	12/12/05	10:35
HR37E	002	SO-17360-121205-DCR-586	12/12/05	10:40
HR37F	003	SO-17360-121205-DCR-587	12/12/05	10:45
HR37G	004	SO-17360-121205-DCR-588	12/12/05	10:47
HR37J	005	SO-17360-121205-DCR-589	12/12/05	10:50
HR37L	006	SO-17360-121205-DCR-590	12/12/05	10:55
HR37N	007	SO-17360-121205-DCR-591	12/12/05	11:35
HR37P	008	SO-17360-121205-DCR-592	12/12/05	11:40
HR37Q	009	SO-17360-121205-DCR-593	12/12/05	11:50
HR37T	010	SO-17360-121205-DCR-594	12/12/05	12:20
HR37V	011	SO-17360-121205-DCR-595	12/12/05	12:30
HR37W	012	SO-17360-121205-DCR-596	12/12/05	12:35
HR37X	013	SO-17360-121205-DCR-597	12/12/05	13:30
HR370	014	SO-17360-121205-DCR-598	12/12/05	13:40
HR372	015	SO-17360-121205-DCR-599	12/12/05	13:45
HR373	016	SO-17360-121205-DCR-600	12/12/05	13:50
HR377	017	SO-17360-121205-DCR-601	12/12/05	13:55
HR38D	018	SO-17360-121205-DCR-602	12/12/05	14:25
HR38F	019	SO-17360-121205-DCR-603	12/12/05	14:30
HR38H	020	SO-17360-121205-DCR-604	12/12/05	14:35
HR38J	021	SO-17360-121205-DCR-605	12/12/05	14:40
HR38N	022	SO-17360-121205-DCR-606	12/12/05	14:45
HR38R	023	SO-17360-121205-DCR-607	12/12/05	15:25
HR38T	024	SO-17360-121205-DCR-608	12/12/05	15:30
HR38W	025	SO-17360-121205-DCR-609	12/12/05	15:35
HR380	026	SO-17360-121205-DCR-610	12/12/05	15:40
HR382	027	SO-17360-121205-DCR-611	12/12/05	15:45
HR384	028	SO-17360-121205-DCR-612	12/12/05	16:45
HR387	029	SO-17360-121205-DCR-613	12/12/05	16:50
HR389	030	SO-17360-121205-DCR-614	12/12/05	16:55
HR39A	031	SO-17360-121205-DCR-615	12/12/05	17:00
HR39C	032	SO-17360-121205-DCR-616	12/12/05	17:02
HR39D	033	SO-17360-121205-DCR-617	12/12/05	17:05

(Continued on next page)

SAMPLE SUMMARY

5L14222 : A5L140222

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SHIPPING
AND
RECEIVING DOCUMENTS

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 1 OF 3

Required Client Information:

Company: CRA, Inc.	Report To: K. Shaw
Address: 14496 Sheldon Rd.	Copy To: B. Miller
Suite 200	Invoice To: D. Stewart
Plymouth, MI 48170	P.O.:
Phone: 734-453-5123	Project Name: GM-Grand Rapids
Fax: 734-453-5201	Project Number: 17360-70
Email:	

Laboratory: STL - North Canton	
Laboratory Location: North Canton OH	
Laboratory Contact: Denise Heckley	
Requested Due Date:	TAT: STD
QA/QC Requirements:	

ID # Nº D [illegible]

SSOW Ref. Code: E030002

Valid Matrix Codes: WG Groundwater; WB Borehole Water; WS Surface Water; SO Soil; SE Sediment; See Back for Additional Codes

Sample Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Preservative: Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	Analysis and Method: PNAs	RCRA metals	Remarks/Lab ID
SO-17360-121205-DCR-585	SO	12/12/05	1035	1	1						X	X	
-586			1040	1	1						X	X	
-587			1045	1	1						X	X	
-588			1047	1	1						X	X	
-589			1050	1	1						X	X	
-590			1055	1	1						X	X	
-591			1135	1	1						X	X	
-592			1140	1	1						X	X	
-593			1150	1	1						X	X	
-594			1220	1	1						X	X	
-595			1230	1	1						X	X	
-596			1235	1	1						X	X	
-597			1330	1	1						X	X	
-598			1340	1	1						X	X	
-599			1345	1	1						X	X	
TOTAL NUMBER OF CONTAINERS				15									

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
FED EX	ONE	[signature] / CRA	12/13/05	1200	[signature]	12/14/05	0945
AIRBILL NO.	8530 1314 2601						

Sample Condition

Temp in °C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Samples Intact	Y / N

Additional Comments:

Sampler Name: David Rivers

Sampler Signature: [signature] Date: 12-13-05

Distribution: WHITE - Fully Executed Copy; YELLOW - Receiving Laboratory Copy; PINK - Shipper; GOLDENROD - Sampler Copy

REV. 0 (6/04)

STL North Canton

30

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

ID # Nº D 0984

SSOW Ref. Code: E030002

quired Client Information:

ompany: CRA, Inc.	Report To: K. Shaw
ddress: 14496 Sheldon Rd.	Copy To: B. Miller
Suite 200	Invoice To: D. Stewart
Plymouth, MI 48170	P.O.:
hone: 734-453-5123	Project Name: GM Grand Rapids
ax: 734-453-5201	Project Number: 17360 70
mail:	

Laboratory:	STL - N. Canton
Laboratory Location:	N. Canton, OH
Laboratory Contact:	D. Heckler
Requested Due Date:	TAT: STD
QA/QC Requirements:	

Analysis and Method

Preservative

mple Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	PNAs	RCRA metals													ms/msd	Remarks/Lab ID
SO-17360-121205-DCR-600	SO	12/12/05	1330	1	1						X	X														
-601			1355	5	5						X	X													X	
-602			1425	2	2						X	X														
-603			1430	2	2						X	X														
-604			1435	2	2						X	X														
-605			1440	2	2						X	X														
-606			1445	2	2						X	X														
-607			1525	2	2						X	X														
-608			1530	2	2						X	X														
-609			1535	2	2						X	X														
-610			1540	2	2						X	X														
-611			1545	2	2						X	X														
-612			1645	2	2						X	X														
-613			1650	2	2						X	X														
-614			1455	2	2						X	X														
TOTAL NUMBER OF CONTAINERS																										

Valid Matrix Codes:
WG Groundwater
WB Borehole Water
WS Surface Water
SO Soil
SE Sediment
See Back for Additional Codes

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
FED EX	1	CRA	12/13/05	1200		12/14/05	0940
AIRBILL NO. 8530 1314 2601							

Sample Condition

emp in °C	
eceived on Ice	Y / N
ealed Cooler	Y / N
amples Intact	Y / N

Additional Comments:

Sampler Name: David Rivers

Sampler Signature: Date: 12-13-05

Distribution: WHITE - Fully Executed Copy YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampler Copy

REV. 0 (6/04)

STL North Canton

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 3 OF 3

ID # № D 0235

SSOW Ref. Code: E030002

quired Client Information:

ompany: CRA, Inc.	Report To: K. Shaw
ddress: 14496 Sheldon Rd.	Copy To: B. Miller
Suite 200	Invoice To: D. Stewart
Plymouth, MI 48170	P.O.:
hone: 734-453-5123	Project Name: GM-Grand Rapids
ax: 734-453-5201	Project Number: 17300 70
mail:	

Laboratory: STL-N. Canton	
Laboratory Location: N. Canton, OH	
Laboratory Contact: D. Heckler	
Requested Due Date:	TAT: STD
QA/QC Requirements:	

Valid Matrix Codes: WG Groundwater, WB Borehole Water, WS Surface Water, SO Soil, SE Sediment. See Back for Additional Codes

ample Identification	Matrix Code	Date Collected	Time Collected	# Containers	Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	PNAs	RCRA metals										Remarks/Lab ID
SO-17360-121205-DCR-615	SO	12/12/05	1700	2	2						X	X										
↓ ↓ ↓ ↓ -616	↓	↓	1702	2	2						X	X										
↓ ↓ ↓ ↓ -617	↓	↓	1705	2	2						X	X										
).																						
l.																						
2.																						
3.																						
4.																						
5.																						
TOTAL NUMBER OF CONTAINERS																						

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
FEDEX	1	[signature] / CRA	12/13/05	1200	[signature] STL	12/14/05	0940
AIRBILL NO. 8530 1314 2601							

Sample Condition

emp in C	
eceived on Ice	Y / N
ealed Cooler	Y / N
amples Intact	Y / N

Additional Comments:

Sampler Name: David Rivers

Sampler Signature: [signature] Date: 12-13-05

Distribution: WHITE - Fully Executed Copy YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampler Copy

REV 01/6/04

STL North Canton

STL Cooler Receipt Form/Narrative **Lot Number:** ASL140222
North Canton Facility

Client: CRA Project: 6M Quote#: 63786
Cooler Received on: 12/14/05 Opened on: 12/14/05 by: [signature]
Fedx [X] Client Drop Off [ ] UPS [ ] DHL [ ] FAS [ ] STL Courier [ ]
Stetson [ ] US Cargo [ ] Other:
STL Cooler No# 709 Foam Box [ ] Client Cooler [ ] Other

1. Were custody seals on the outside of the cooler? Yes [ ] No [X] Intact? Yes [ ] No [ ] NA [X]
   If YES, Quantity —
   Were the custody seals signed and dated? Yes [ ] No [ ] NA [X]
2. Shipper's packing slip attached to this form? Yes [X] No [ ] NA [ ]
3. Did custody papers accompany the samples? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Did you sign the custody papers in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [ ] None [ ] Other :
6. Cooler temperature upon receipt 2.3 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial [ ] Coolant & Sample [ ] Against Bottles [ ] IR [X] ICE/H_2O Slurry [ ]
COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]

7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels and/or tags be reconciled with the COC? Yes [X] No [ ]
9. Were samples at the correct pH? (record below/on back) Yes [ ] No [ ] NA [X]
10. Were correct bottles used for the tests indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [ ] NA [X]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a Trip Blank present in the cooler? Yes [ ] No [X] Were VOAs on the COC? Yes [ ] No [X]
14. Does the trip blank number match the cooler number in which it was received? Yes [ ] No [ ] NA [X]

Contacted PM _____ Date: _____ by: _____ via Voice Mail [ ] Verbal [ ] Other [ ]
Concerning: _____

√	
	1. CHAIN OF CUSTODY
	The following discrepancies occurred:
	2. SAMPLE CONDITION
	Sample(s) _____ were received after the recommended holding time had expired.
	Sample(s) _____ were received in a broken container.
	3. SAMPLE PRESERVATION
	Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #* 091305-*HNO3; Sulfuric Acid Lot #* 100405-*H2SO4; Sodium Hydroxide Lot #* -041305 -*NaOH; Hydrochloric Acid Lot #* 100504-*HCl; Sodium Hydroxide and Zinc Acetate Lot #* 071604-*CH3COO2ZN/NaOH*
	Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)
	4. Other (see below or back)

Client ID	pH	Date	Initials

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

GCMS SEMIVOLATILE DATA

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-585

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-001 **Work Order #...:** HR36E1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 12.5 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 1.5 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**1100 J**	**3400**	**ug/kg**	**12**
Acenaphthylene	ND	3400	ug/kg	18
Anthracene	**2500 J**	**3400**	**ug/kg**	**29**
Benzo(a)anthracene	**6500**	**3400**	**ug/kg**	**18**
Benzo(a)pyrene	**6000**	**3400**	**ug/kg**	**29**
Benzo(b)fluoranthene	**8600**	**3400**	**ug/kg**	**29**
Benzo(ghi)perylene	**3900**	**3400**	**ug/kg**	**23**
Benzo(k)fluoranthene	**3200 J**	**3400**	**ug/kg**	**29**
Chrysene	**7500**	**3400**	**ug/kg**	**13**
Dibenz(a,h)anthracene	**1200 J**	**3400**	**ug/kg**	**19**
Fluoranthene	**16000**	**3400**	**ug/kg**	**12**
Fluorene	**940 J**	**3400**	**ug/kg**	**17**
Indeno(1,2,3-cd)pyrene	**3700**	**3400**	**ug/kg**	**25**
2-Methylnaphthalene	**90 J**	**3400**	**ug/kg**	**13**
Naphthalene	**170 J**	**3400**	**ug/kg**	**11**
Phenanthrene	**10000**	**3400**	**ug/kg**	**14**
Pyrene	**12000**	**3400**	**ug/kg**	**13**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84 DIL	(42 - 110)
2-Fluorobiphenyl	76 DIL	(43 - 110)
Terphenyl-d14	97 DIL	(37 - 137)
Phenol-d5	64 DIL	(25 - 115)
2-Fluorophenol	43 DIL	(11 - 116)
2,4,6-Tribromophenol	0.0 DIL,*	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-586

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-002 **Work Order #...:** HR37E1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.09 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 12 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	300	ug/kg	1.0
Acenaphthylene	ND	300	ug/kg	1.6
Anthracene	**52 J**	**300**	**ug/kg**	**2.6**
Benzo(a)anthracene	**440**	**300**	**ug/kg**	**1.6**
Benzo(a)pyrene	**510**	**300**	**ug/kg**	**2.6**
Benzo(b)fluoranthene	**1200**	**300**	**ug/kg**	**2.6**
Benzo(ghi)perylene	**860**	**300**	**ug/kg**	**2.0**
Benzo(k)fluoranthene	**330**	**300**	**ug/kg**	**2.6**
Chrysene	**690**	**300**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**300**	**300**	**ug/kg**	**1.7**
Fluoranthene	**790**	**300**	**ug/kg**	**1.1**
Fluorene	**22 J**	**300**	**ug/kg**	**1.5**
Indeno(1,2,3-cd)pyrene	**630**	**300**	**ug/kg**	**2.3**
2-Methylnaphthalene	**35 J**	**300**	**ug/kg**	**1.1**
Naphthalene	**89 J**	**300**	**ug/kg**	**1.0**
Phenanthrene	**680**	**300**	**ug/kg**	**1.2**
Pyrene	**530**	**300**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(42 - 110)
2-Fluorobiphenyl	68	(43 - 110)
Terphenyl-d14	79	(37 - 137)
Phenol-d5	69	(25 - 115)
2-Fluorophenol	66	(11 - 116)
2,4,6-Tribromophenol	72	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-587

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-003 **Work Order #...:** HR37F1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:45 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.11 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.7 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.99
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	**8.2 J**	**280**	**ug/kg**	**2.5**
Benzo(a)anthracene	**31 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**25 J**	**280**	**ug/kg**	**2.5**
Benzo(b)fluoranthene	**45 J**	**280**	**ug/kg**	**2.5**
Benzo(ghi)perylene	**21 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**15 J**	**280**	**ug/kg**	**2.5**
Chrysene	**37 J**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**67 J**	**280**	**ug/kg**	**1.0**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**17 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	ND	280	ug/kg	1.1
Naphthalene	ND	280	ug/kg	0.95
Phenanthrene	**41 J**	**280**	**ug/kg**	**1.2**
Pyrene	**47 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	67	(42 - 110)
2-Fluorobiphenyl	59	(43 - 110)
Terphenyl-d14	75	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	60	(11 - 116)
2,4,6-Tribromophenol	52	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-588

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-004 **Work Order #...:** HR37G1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:47 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.13 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 5.5 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.97
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.4
Benzo(a)anthracene	**21 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**15 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**26 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**11 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**9.2 J**	**280**	**ug/kg**	**2.4**
Chrysene	**24 J**	**280**	**ug/kg**	**1.0**
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**46 J**	**280**	**ug/kg**	**0.98**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**9.5 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	ND	280	ug/kg	1.0
Naphthalene	ND	280	ug/kg	0.94
Phenanthrene	**33 J**	**280**	**ug/kg**	**1.2**
Pyrene	**34 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(42 - 110)
2-Fluorobiphenyl	70	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	70	(25 - 115)
2-Fluorophenol	63	(11 - 116)
2,4,6-Tribromophenol	61	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-589

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-005 **Work Order #...:** HR37J1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:50 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.09 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 4.6 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.96
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	**7.6 J**	**280**	**ug/kg**	**2.4**
Benzo(a)anthracene	**32 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**26 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**38 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**17 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**18 J**	**280**	**ug/kg**	**2.4**
Chrysene	**33 J**	**280**	**ug/kg**	**1.0**
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**68 J**	**280**	**ug/kg**	**0.97**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**16 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	ND	280	ug/kg	1.0
Naphthalene	ND	280	ug/kg	0.93
Phenanthrene	**44 J**	**280**	**ug/kg**	**1.2**
Pyrene	**47 J**	**280**	**ug/kg**	**1.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(42 - 110)
2-Fluorobiphenyl	66	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	63	(25 - 115)
2-Fluorophenol	47	(11 - 116)
2,4,6-Tribromophenol	49	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-590

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-006 **Work Order #...:** HR37L1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 10:55 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.15 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.98
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.5
Benzo(a)anthracene	**13 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**9.9 J**	**280**	**ug/kg**	**2.5**
Benzo(b)fluoranthene	**15 J**	**280**	**ug/kg**	**2.5**
Benzo(ghi)perylene	**7.2 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	ND	280	ug/kg	2.5
Chrysene	**14 J**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**26 J**	**280**	**ug/kg**	**0.99**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.1
Naphthalene	ND	280	ug/kg	0.95
Phenanthrene	**16 J**	**280**	**ug/kg**	**1.2**
Pyrene	**19 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(42 - 110)
2-Fluorobiphenyl	72	(43 - 110)
Terphenyl-d14	83	(37 - 137)
Phenol-d5	76	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	66	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-591

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-007 **Work Order #...:** HR37N1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 11:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 4.0 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**12 J**	**280**	**ug/kg**	**0.96**
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	**35 J**	**280**	**ug/kg**	**2.4**
Benzo(a)anthracene	**120 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**120 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**170 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**90 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**51 J**	**280**	**ug/kg**	**2.4**
Chrysene	**130 J**	**280**	**ug/kg**	**1.0**
Dibenz(a,h)anthracene	**22 J**	**280**	**ug/kg**	**1.6**
Fluoranthene	**280**	**280**	**ug/kg**	**0.97**
Fluorene	**9.4 J**	**280**	**ug/kg**	**1.4**
Indeno(1,2,3-cd)pyrene	**77 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	**8.2 J**	**280**	**ug/kg**	**1.0**
Naphthalene	ND	280	ug/kg	0.93
Phenanthrene	**120 J**	**280**	**ug/kg**	**1.1**
Pyrene	**210 J**	**280**	**ug/kg**	**1.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(42 - 110)
2-Fluorobiphenyl	80	(43 - 110)
Terphenyl-d14	87	(37 - 137)
Phenol-d5	85	(25 - 115)
2-Fluorophenol	63	(11 - 116)
2,4,6-Tribromophenol	48	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-592

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-008 **Work Order #...:** HR37P1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 11:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 7.5 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	290	ug/kg	0.99
Acenaphthylene	ND	290	ug/kg	1.5
Anthracene	ND	290	ug/kg	2.5
Benzo(a)anthracene	ND	290	ug/kg	1.5
Benzo(a)pyrene	ND	290	ug/kg	2.5
Benzo(b)fluoranthene	ND	290	ug/kg	2.5
Benzo(ghi)perylene	ND	290	ug/kg	1.9
Benzo(k)fluoranthene	ND	290	ug/kg	2.5
Chrysene	ND	290	ug/kg	1.1
Dibenz(a,h)anthracene	ND	290	ug/kg	1.6
Fluoranthene	ND	290	ug/kg	1.0
Fluorene	ND	290	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	2.2
2-Methylnaphthalene	ND	290	ug/kg	1.1
Naphthalene	ND	290	ug/kg	0.96
Phenanthrene	ND	290	ug/kg	1.2
Pyrene	ND	290	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82	(42 - 110)
2-Fluorobiphenyl	74	(43 - 110)
Terphenyl-d14	82	(37 - 137)
Phenol-d5	83	(25 - 115)
2-Fluorophenol	73	(11 - 116)
2,4,6-Tribromophenol	78	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-593

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-009 **Work Order #...:** HR37Q1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 11:50 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.16 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.2 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.98
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.5
Benzo(a)anthracene	ND	280	ug/kg	1.5
Benzo(a)pyrene	ND	280	ug/kg	2.5
Benzo(b)fluoranthene	ND	280	ug/kg	2.5
Benzo(ghi)perylene	ND	280	ug/kg	1.9
Benzo(k)fluoranthene	ND	280	ug/kg	2.5
Chrysene	ND	280	ug/kg	1.1
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	ND	280	ug/kg	0.99
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.1
Naphthalene	ND	280	ug/kg	0.95
Phenanthrene	ND	280	ug/kg	1.2
Pyrene	ND	280	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(42 - 110)
2-Fluorobiphenyl	66	(43 - 110)
Terphenyl-d14	81	(37 - 137)
Phenol-d5	70	(25 - 115)
2-Fluorophenol	60	(11 - 116)
2,4,6-Tribromophenol	66	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-594

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-010 **Work Order #...:** HR37T1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 12:20 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 5.6 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.97
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.4
Benzo(a)anthracene	**21 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**25 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**40 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**20 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**15 J**	**280**	**ug/kg**	**2.4**
Chrysene	**36 J**	**280**	**ug/kg**	**1.0**
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**40 J**	**280**	**ug/kg**	**0.98**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**15 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	**25 J**	**280**	**ug/kg**	**1.0**
Naphthalene	**13 J**	**280**	**ug/kg**	**0.94**
Phenanthrene	**37 J**	**280**	**ug/kg**	**1.2**
Pyrene	**35 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	79	(42 - 110)
2-Fluorobiphenyl	74	(43 - 110)
Terphenyl-d14	82	(37 - 137)
Phenol-d5	75	(25 - 115)
2-Fluorophenol	58	(11 - 116)
2,4,6-Tribromophenol	51	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-595

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-011 **Work Order #...:** HR37V1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 12:30 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 5.7 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.98
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.4
Benzo(a)anthracene	ND	280	ug/kg	1.5
Benzo(a)pyrene	ND	280	ug/kg	2.4
Benzo(b)fluoranthene	ND	280	ug/kg	2.4
Benzo(ghi)perylene	ND	280	ug/kg	1.9
Benzo(k)fluoranthene	ND	280	ug/kg	2.4
Chrysene	ND	280	ug/kg	1.0
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	ND	280	ug/kg	0.99
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.0
Naphthalene	ND	280	ug/kg	0.94
Phenanthrene	ND	280	ug/kg	1.2
Pyrene	ND	280	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(42 - 110)
2-Fluorobiphenyl	64	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	73	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	76	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-596

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-012 **Work Order #...:** HR37W1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 12:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.17 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 4.5 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.96
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.4
Benzo(a)anthracene	ND	280	ug/kg	1.5
Benzo(a)pyrene	ND	280	ug/kg	2.4
Benzo(b)fluoranthene	ND	280	ug/kg	2.4
Benzo(ghi)perylene	ND	280	ug/kg	1.9
Benzo(k)fluoranthene	ND	280	ug/kg	2.4
Chrysene	ND	280	ug/kg	1.0
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	ND	280	ug/kg	0.97
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.0
Naphthalene	ND	280	ug/kg	0.93
Phenanthrene	ND	280	ug/kg	1.2
Pyrene	ND	280	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	76	(42 - 110)
2-Fluorobiphenyl	70	(43 - 110)
Terphenyl-d14	82	(37 - 137)
Phenol-d5	72	(25 - 115)
2-Fluorophenol	59	(11 - 116)
2,4,6-Tribromophenol	51	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-597

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-013 **Work Order #...:** HR37X1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 13:30 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.07 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 7.0 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.99
Acenaphthylene	**10 J**	**280**	**ug/kg**	**1.5**
Anthracene	**9.9 J**	**280**	**ug/kg**	**2.5**
Benzo(a)anthracene	**47 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**49 J**	**280**	**ug/kg**	**2.5**
Benzo(b)fluoranthene	**87 J**	**280**	**ug/kg**	**2.5**
Benzo(ghi)perylene	**46 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**22 J**	**280**	**ug/kg**	**2.5**
Chrysene	**80 J**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**13 J**	**280**	**ug/kg**	**1.6**
Fluoranthene	**78 J**	**280**	**ug/kg**	**1.0**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**33 J**	**280**	**ug/kg**	**2.2**
2-Methylnaphthalene	**86 J**	**280**	**ug/kg**	**1.1**
Naphthalene	**42 J**	**280**	**ug/kg**	**0.96**
Phenanthrene	**100 J**	**280**	**ug/kg**	**1.2**
Pyrene	**65 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(42 - 110)
2-Fluorobiphenyl	77	(43 - 110)
Terphenyl-d14	83	(37 - 137)
Phenol-d5	79	(25 - 115)
2-Fluorophenol	77	(11 - 116)
2,4,6-Tribromophenol	42	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-598

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-014 **Work Order #...:** HR3701AA **Matrix.....:** SO
Date Sampled...: 12/12/05 13:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.03 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 12 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	300	ug/kg	1.1
Acenaphthylene	ND	300	ug/kg	1.6
Anthracene	**9.8 J**	**300**	**ug/kg**	**2.6**
Benzo(a)anthracene	**47 J**	**300**	**ug/kg**	**1.6**
Benzo(a)pyrene	**45 J**	**300**	**ug/kg**	**2.6**
Benzo(b)fluoranthene	**81 J**	**300**	**ug/kg**	**2.6**
Benzo(ghi)perylene	**45 J**	**300**	**ug/kg**	**2.1**
Benzo(k)fluoranthene	**22 J**	**300**	**ug/kg**	**2.6**
Chrysene	**79 J**	**300**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**13 J**	**300**	**ug/kg**	**1.7**
Fluoranthene	**82 J**	**300**	**ug/kg**	**1.1**
Fluorene	ND	300	ug/kg	1.5
Indeno(1,2,3-cd)pyrene	**32 J**	**300**	**ug/kg**	**2.3**
2-Methylnaphthalene	**79 J**	**300**	**ug/kg**	**1.1**
Naphthalene	**36 J**	**300**	**ug/kg**	**1.0**
Phenanthrene	**100 J**	**300**	**ug/kg**	**1.3**
Pyrene	**67 J**	**300**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(42 - 110)
2-Fluorobiphenyl	77	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	78	(25 - 115)
2-Fluorophenol	77	(11 - 116)
2,4,6-Tribromophenol	42	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-599

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-015 **Work Order #...:** HR3721AA **Matrix.....:** SO
Date Sampled...: 12/12/05 13:45 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 5 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.9 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1400	ug/kg	4.9
Acenaphthylene	ND	1400	ug/kg	7.5
Anthracene	ND	1400	ug/kg	12
Benzo(a)anthracene	ND	1400	ug/kg	7.5
Benzo(a)pyrene	ND	1400	ug/kg	12
Benzo(b)fluoranthene	ND	1400	ug/kg	12
Benzo(ghi)perylene	ND	1400	ug/kg	9.7
Benzo(k)fluoranthene	ND	1400	ug/kg	12
Chrysene	ND	1400	ug/kg	5.3
Dibenz(a,h)anthracene	ND	1400	ug/kg	8.1
Fluoranthene	ND	1400	ug/kg	5.0
Fluorene	ND	1400	ug/kg	7.0
Indeno(1,2,3-cd)pyrene	ND	1400	ug/kg	11
2-Methylnaphthalene	ND	1400	ug/kg	5.3
Naphthalene	ND	1400	ug/kg	4.8
Phenanthrene	ND	1400	ug/kg	5.9
Pyrene	ND	1400	ug/kg	5.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	89 DIL	(42 - 110)
2-Fluorobiphenyl	85 DIL	(43 - 110)
Terphenyl-d14	103 DIL	(37 - 137)
Phenol-d5	80 DIL	(25 - 115)
2-Fluorophenol	84 DIL	(11 - 116)
2,4,6-Tribromophenol	69 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-600

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-016 **Work Order #...:** HR3731AA **Matrix.....:** SO
Date Sampled...: 12/12/05 13:50 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 5 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 8.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1400	ug/kg	5.0
Acenaphthylene	ND	1400	ug/kg	7.6
Anthracene	ND	1400	ug/kg	13
Benzo(a)anthracene	ND	1400	ug/kg	7.6
Benzo(a)pyrene	ND	1400	ug/kg	13
Benzo(b)fluoranthene	ND	1400	ug/kg	13
Benzo(ghi)perylene	ND	1400	ug/kg	9.8
Benzo(k)fluoranthene	ND	1400	ug/kg	13
Chrysene	ND	1400	ug/kg	5.4
Dibenz(a,h)anthracene	ND	1400	ug/kg	8.2
Fluoranthene	ND	1400	ug/kg	5.1
Fluorene	ND	1400	ug/kg	7.1
Indeno(1,2,3-cd)pyrene	ND	1400	ug/kg	11
2-Methylnaphthalene	ND	1400	ug/kg	5.4
Naphthalene	ND	1400	ug/kg	4.9
Phenanthrene	ND	1400	ug/kg	6.0
Pyrene	ND	1400	ug/kg	5.5

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	91 DIL	(42 - 110)
2-Fluorobiphenyl	87 DIL	(43 - 110)
Terphenyl-d14	97 DIL	(37 - 137)
Phenol-d5	77 DIL	(25 - 115)
2-Fluorophenol	82 DIL	(11 - 116)
2,4,6-Tribromophenol	85 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-601

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-017 **Work Order #...:** HR3771AA **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.11 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 8.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	290	ug/kg	1.0
Acenaphthylene	ND	290	ug/kg	1.5
Anthracene	ND	290	ug/kg	2.5
Benzo(a)anthracene	ND	290	ug/kg	1.5
Benzo(a)pyrene	ND	290	ug/kg	2.5
Benzo(b)fluoranthene	ND	290	ug/kg	2.5
Benzo(ghi)perylene	ND	290	ug/kg	2.0
Benzo(k)fluoranthene	ND	290	ug/kg	2.5
Chrysene	ND	290	ug/kg	1.1
Dibenz(a,h)anthracene	ND	290	ug/kg	1.6
Fluoranthene	ND	290	ug/kg	1.0
Fluorene	ND	290	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	2.2
2-Methylnaphthalene	ND	290	ug/kg	1.1
Naphthalene	ND	290	ug/kg	0.97
Phenanthrene	ND	290	ug/kg	1.2
Pyrene	ND	290	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83	(42 - 110)
2-Fluorobiphenyl	74	(43 - 110)
Terphenyl-d14	87	(37 - 137)
Phenol-d5	75	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	79	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-602

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-018 **Work Order #...:** HR38D1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:25 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.7 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**180 J**	**280**	**ug/kg**	**0.99**
Acenaphthylene	**26 J**	**280**	**ug/kg**	**1.5**
Anthracene	**570**	**280**	**ug/kg**	**2.5**
Benzo(a)anthracene	**2100 E**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**1800 E**	**280**	**ug/kg**	**2.5**
Benzo(b)fluoranthene	**2700 E**	**280**	**ug/kg**	**2.5**
Benzo(ghi)perylene	**1300**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**820**	**280**	**ug/kg**	**2.5**
Chrysene	**2500 E**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**430**	**280**	**ug/kg**	**1.6**
Fluoranthene	**2900 E**	**280**	**ug/kg**	**1.0**
Fluorene	**260 J**	**280**	**ug/kg**	**1.4**
Indeno(1,2,3-cd)pyrene	**1100**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	**130 J**	**280**	**ug/kg**	**1.1**
Naphthalene	**92 J**	**280**	**ug/kg**	**0.95**
Phenanthrene	**2000 E**	**280**	**ug/kg**	**1.2**
Pyrene	**2600 E**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84	(42 - 110)
2-Fluorobiphenyl	76	(43 - 110)
Terphenyl-d14	90	(37 - 137)
Phenol-d5	72	(25 - 115)
2-Fluorophenol	61	(11 - 116)
2,4,6-Tribromophenol	32 *	(35 - 116)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-602

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-018 **Work Order #...:** HR38D2AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:25 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/20/05
Prep Batch #...: 5348338
Dilution Factor: 2.5 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.7 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**170 J**	**710**	**ug/kg**	**2.5**
Acenaphthylene	ND	710	ug/kg	3.8
Anthracene	**530 J**	**710**	**ug/kg**	**6.2**
Benzo(a)anthracene	**2100**	**710**	**ug/kg**	**3.8**
Benzo(a)pyrene	**2000**	**710**	**ug/kg**	**6.2**
Benzo(b)fluoranthene	**3000**	**710**	**ug/kg**	**6.2**
Benzo(ghi)perylene	**1300**	**710**	**ug/kg**	**4.8**
Benzo(k)fluoranthene	**950**	**710**	**ug/kg**	**6.2**
Chrysene	**2600**	**710**	**ug/kg**	**2.7**
Dibenz(a,h)anthracene	**450 J**	**710**	**ug/kg**	**4.0**
Fluoranthene	**3100**	**710**	**ug/kg**	**2.5**
Fluorene	**250 J**	**710**	**ug/kg**	**3.5**
Indeno(1,2,3-cd)pyrene	**1100**	**710**	**ug/kg**	**5.4**
2-Methylnaphthalene	**110 J**	**710**	**ug/kg**	**2.7**
Naphthalene	**83 J**	**710**	**ug/kg**	**2.4**
Phenanthrene	**2200**	**710**	**ug/kg**	**2.9**
Pyrene	**2600**	**710**	**ug/kg**	**2.7**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	82 DIL	(42 - 110)
2-Fluorobiphenyl	73 DIL	(43 - 110)
Terphenyl-d14	80 DIL	(37 - 137)
Phenol-d5	67 DIL	(25 - 115)
2-Fluorophenol	64 DIL	(11 - 116)
2,4,6-Tribromophenol	31 DIL,*	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-603

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-019 **Work Order #...:** HR38F1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:30 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 40 **Initial Wgt/Vol:** 30.02 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.8 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**1900 J**	**11000**	**ug/kg**	**39**
Acenaphthylene	ND	11000	ug/kg	60
Anthracene	**5200 J**	**11000**	**ug/kg**	**99**
Benzo(a)anthracene	**17000**	**11000**	**ug/kg**	**60**
Benzo(a)pyrene	**17000**	**11000**	**ug/kg**	**99**
Benzo(b)fluoranthene	**24000**	**11000**	**ug/kg**	**99**
Benzo(ghi)perylene	**12000**	**11000**	**ug/kg**	**77**
Benzo(k)fluoranthene	**8900 J**	**11000**	**ug/kg**	**99**
Chrysene	**21000**	**11000**	**ug/kg**	**42**
Dibenz(a,h)anthracene	**3400 J**	**11000**	**ug/kg**	**64**
Fluoranthene	**37000**	**11000**	**ug/kg**	**40**
Fluorene	**2200 J**	**11000**	**ug/kg**	**56**
Indeno(1,2,3-cd)pyrene	**10000 J**	**11000**	**ug/kg**	**86**
2-Methylnaphthalene	ND	11000	ug/kg	42
Naphthalene	ND	11000	ug/kg	38
Phenanthrene	**23000**	**11000**	**ug/kg**	**47**
Pyrene	**29000**	**11000**	**ug/kg**	**43**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	0.0 DIL,*	(42 - 110)
2-Fluorobiphenyl	0.0 DIL,*	(43 - 110)
Terphenyl-d14	96 DIL	(37 - 137)
Phenol-d5	0.0 DIL,*	(25 - 115)
2-Fluorophenol	0.0 DIL,*	(11 - 116)
2,4,6-Tribromophenol	0.0 DIL,*	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-604

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-020 **Work Order #...:** HR38H1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30.01 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 11 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**180 J**	**300**	**ug/kg**	**1.0**
Acenaphthylene	**17 J**	**300**	**ug/kg**	**1.6**
Anthracene	**540**	**300**	**ug/kg**	**2.6**
Benzo(a)anthracene	**2100 E**	**300**	**ug/kg**	**1.6**
Benzo(a)pyrene	**1700**	**300**	**ug/kg**	**2.6**
Benzo(b)fluoranthene	**3000 E**	**300**	**ug/kg**	**2.6**
Benzo(ghi)perylene	**1300**	**300**	**ug/kg**	**2.0**
Benzo(k)fluoranthene	**1000**	**300**	**ug/kg**	**2.6**
Chrysene	**2800 E**	**300**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**490**	**300**	**ug/kg**	**1.7**
Fluoranthene	**3100 E**	**300**	**ug/kg**	**1.0**
Fluorene	**230 J**	**300**	**ug/kg**	**1.5**
Indeno(1,2,3-cd)pyrene	**1200**	**300**	**ug/kg**	**2.2**
2-Methylnaphthalene	**78 J**	**300**	**ug/kg**	**1.1**
Naphthalene	**270 J**	**300**	**ug/kg**	**1.0**
Phenanthrene	**2400 E**	**300**	**ug/kg**	**1.2**
Pyrene	**2700 E**	**300**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	90	(42 - 110)
2-Fluorobiphenyl	83	(43 - 110)
Terphenyl-d14	97	(37 - 137)
Phenol-d5	77	(25 - 115)
2-Fluorophenol	76	(11 - 116)
2,4,6-Tribromophenol	47	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-604

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-020 **Work Order #...:** HR38H2AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/20/05
Prep Batch #...: 5348338
Dilution Factor: 2.5 **Initial Wgt/Vol:** 30.01 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 11 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**160 J**	**740**	**ug/kg**	**2.6**
Acenaphthylene	ND	740	ug/kg	3.9
Anthracene	**480 J**	**740**	**ug/kg**	**6.5**
Benzo(a)anthracene	**1900**	**740**	**ug/kg**	**3.9**
Benzo(a)pyrene	**1700**	**740**	**ug/kg**	**6.5**
Benzo(b)fluoranthene	**3000**	**740**	**ug/kg**	**6.5**
Benzo(ghi)perylene	**1300**	**740**	**ug/kg**	**5.0**
Benzo(k)fluoranthene	**950**	**740**	**ug/kg**	**6.5**
Chrysene	**2600**	**740**	**ug/kg**	**2.8**
Dibenz(a,h)anthracene	**470 J**	**740**	**ug/kg**	**4.2**
Fluoranthene	**3200**	**740**	**ug/kg**	**2.6**
Fluorene	**210 J**	**740**	**ug/kg**	**3.6**
Indeno(1,2,3-cd)pyrene	**1100**	**740**	**ug/kg**	**5.6**
2-Methylnaphthalene	**70 J**	**740**	**ug/kg**	**2.8**
Naphthalene	**240 J**	**740**	**ug/kg**	**2.5**
Phenanthrene	**2400**	**740**	**ug/kg**	**3.1**
Pyrene	**2500**	**740**	**ug/kg**	**2.8**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	83 DIL	(42 - 110)
2-Fluorobiphenyl	76 DIL	(43 - 110)
Terphenyl-d14	83 DIL	(37 - 137)
Phenol-d5	74 DIL	(25 - 115)
2-Fluorophenol	67 DIL	(11 - 116)
2,4,6-Tribromophenol	46 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-605

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-021 **Work Order #...:** HR38J1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 25 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**43 J**	**350**	**ug/kg**	**1.2**
Acenaphthylene	ND	350	ug/kg	1.9
Anthracene	**120 J**	**350**	**ug/kg**	**3.1**
Benzo(a)anthracene	**430**	**350**	**ug/kg**	**1.9**
Benzo(a)pyrene	**320 J**	**350**	**ug/kg**	**3.1**
Benzo(b)fluoranthene	**520**	**350**	**ug/kg**	**3.1**
Benzo(ghi)perylene	**250 J**	**350**	**ug/kg**	**2.4**
Benzo(k)fluoranthene	**120 J**	**350**	**ug/kg**	**3.1**
Chrysene	**490**	**350**	**ug/kg**	**1.3**
Dibenz(a,h)anthracene	ND	350	ug/kg	2.0
Fluoranthene	**810**	**350**	**ug/kg**	**1.2**
Fluorene	**47 J**	**350**	**ug/kg**	**1.7**
Indeno(1,2,3-cd)pyrene	**210 J**	**350**	**ug/kg**	**2.7**
2-Methylnaphthalene	ND	350	ug/kg	1.3
Naphthalene	ND	350	ug/kg	1.2
Phenanthrene	**630**	**350**	**ug/kg**	**1.5**
Pyrene	**640**	**350**	**ug/kg**	**1.3**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	67	(43 - 110)
Terphenyl-d14	76	(37 - 137)
Phenol-d5	66	(25 - 115)
2-Fluorophenol	68	(11 - 116)
2,4,6-Tribromophenol	72	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-606

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-022 **Work Order #...:** HR38N1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 14:45 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.13 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 7.8 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	290	ug/kg	1.0
Acenaphthylene	ND	290	ug/kg	1.5
Anthracene	ND	290	ug/kg	2.5
Benzo(a)anthracene	**12 J**	**290**	**ug/kg**	**1.5**
Benzo(a)pyrene	**12 J**	**290**	**ug/kg**	**2.5**
Benzo(b)fluoranthene	**15 J**	**290**	**ug/kg**	**2.5**
Benzo(ghi)perylene	ND	290	ug/kg	2.0
Benzo(k)fluoranthene	ND	290	ug/kg	2.5
Chrysene	**13 J**	**290**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	ND	290	ug/kg	1.6
Fluoranthene	**24 J**	**290**	**ug/kg**	**1.0**
Fluorene	ND	290	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	2.2
2-Methylnaphthalene	ND	290	ug/kg	1.1
Naphthalene	ND	290	ug/kg	0.97
Phenanthrene	**20 J**	**290**	**ug/kg**	**1.2**
Pyrene	**19 J**	**290**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(42 - 110)
2-Fluorobiphenyl	64	(43 - 110)
Terphenyl-d14	79	(37 - 137)
Phenol-d5	59	(25 - 115)
2-Fluorophenol	63	(11 - 116)
2,4,6-Tribromophenol	56	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-607

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-023 **Work Order #...:** HR38R1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 15:25 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 50 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 15 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**2300 J**	**15000**	**ug/kg**	**54**
Acenaphthylene	**2100 J**	**15000**	**ug/kg**	**82**
Anthracene	**9000 J**	**15000**	**ug/kg**	**130**
Benzo(a)anthracene	**29000**	**15000**	**ug/kg**	**82**
Benzo(a)pyrene	**28000**	**15000**	**ug/kg**	**130**
Benzo(b)fluoranthene	**38000**	**15000**	**ug/kg**	**130**
Benzo(ghi)perylene	**21000**	**15000**	**ug/kg**	**110**
Benzo(k)fluoranthene	**14000 J**	**15000**	**ug/kg**	**130**
Chrysene	**32000**	**15000**	**ug/kg**	**58**
Dibenz(a,h)anthracene	**6200 J**	**15000**	**ug/kg**	**88**
Fluoranthene	**49000**	**15000**	**ug/kg**	**55**
Fluorene	**3500 J**	**15000**	**ug/kg**	**76**
Indeno(1,2,3-cd)pyrene	**17000**	**15000**	**ug/kg**	**120**
2-Methylnaphthalene	**1500 J**	**15000**	**ug/kg**	**58**
Naphthalene	**2600 J**	**15000**	**ug/kg**	**52**
Phenanthrene	**30000**	**15000**	**ug/kg**	**65**
Pyrene	**39000**	**15000**	**ug/kg**	**59**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	0.0 DIL,*	(42 - 110)
2-Fluorobiphenyl	69 DIL	(43 - 110)
Terphenyl-d14	77 DIL	(37 - 137)
Phenol-d5	50 DIL	(25 - 115)
2-Fluorophenol	53 DIL	(11 - 116)
2,4,6-Tribromophenol	63 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-608

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-024 **Work Order #...:** HR38T1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 15:30 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 20 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 7.6 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**1300 J**	**5700**	**ug/kg**	**20**
Acenaphthylene	ND	5700	ug/kg	30
Anthracene	**2900 J**	**5700**	**ug/kg**	**50**
Benzo(a)anthracene	**8800**	**5700**	**ug/kg**	**30**
Benzo(a)pyrene	**8400**	**5700**	**ug/kg**	**50**
Benzo(b)fluoranthene	**12000**	**5700**	**ug/kg**	**50**
Benzo(ghi)perylene	**6300**	**5700**	**ug/kg**	**39**
Benzo(k)fluoranthene	**4400 J**	**5700**	**ug/kg**	**50**
Chrysene	**12000**	**5700**	**ug/kg**	**21**
Dibenz(a,h)anthracene	**1900 J**	**5700**	**ug/kg**	**32**
Fluoranthene	**17000**	**5700**	**ug/kg**	**20**
Fluorene	**1500 J**	**5700**	**ug/kg**	**28**
Indeno(1,2,3-cd)pyrene	**5200 J**	**5700**	**ug/kg**	**43**
2-Methylnaphthalene	**710 J**	**5700**	**ug/kg**	**21**
Naphthalene	**910 J**	**5700**	**ug/kg**	**19**
Phenanthrene	**14000**	**5700**	**ug/kg**	**24**
Pyrene	**14000**	**5700**	**ug/kg**	**22**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	64 DIL	(42 - 110)
2-Fluorobiphenyl	86 DIL	(43 - 110)
Terphenyl-d14	98 DIL	(37 - 137)
Phenol-d5	75 DIL	(25 - 115)
2-Fluorophenol	68 DIL	(11 - 116)
2,4,6-Tribromophenol	37 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-609

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-025 **Work Order #...:** HR38W1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 15:35 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 50 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 8.5 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	14000	ug/kg	50
Acenaphthylene	ND	14000	ug/kg	76
Anthracene	ND	14000	ug/kg	130
Benzo(a)anthracene	ND	14000	ug/kg	76
Benzo(a)pyrene	ND	14000	ug/kg	130
Benzo(b)fluoranthene	ND	14000	ug/kg	130
Benzo(ghi)perylene	ND	14000	ug/kg	98
Benzo(k)fluoranthene	ND	14000	ug/kg	130
Chrysene	ND	14000	ug/kg	54
Dibenz(a,h)anthracene	ND	14000	ug/kg	82
Fluoranthene	ND	14000	ug/kg	51
Fluorene	ND	14000	ug/kg	71
Indeno(1,2,3-cd)pyrene	ND	14000	ug/kg	110
2-Methylnaphthalene	ND	14000	ug/kg	54
Naphthalene	ND	14000	ug/kg	49
Phenanthrene	ND	14000	ug/kg	60
Pyrene	ND	14000	ug/kg	55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	54 DIL	(42 - 110)
2-Fluorobiphenyl	69 DIL	(43 - 110)
Terphenyl-d14	73 DIL	(37 - 137)
Phenol-d5	64 DIL	(25 - 115)
2-Fluorophenol	65 DIL	(11 - 116)
2,4,6-Tribromophenol	75 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-610

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-026 **Work Order #...:** HR3801AA **Matrix.....:** SO
Date Sampled...: 12/12/05 15:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 50 **Initial Wgt/Vol:** 30.13 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 15 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	16000	ug/kg	54
Acenaphthylene	ND	16000	ug/kg	82
Anthracene	ND	16000	ug/kg	140
Benzo(a)anthracene	ND	16000	ug/kg	82
Benzo(a)pyrene	ND	16000	ug/kg	140
Benzo(b)fluoranthene	ND	16000	ug/kg	140
Benzo(ghi)perylene	ND	16000	ug/kg	110
Benzo(k)fluoranthene	ND	16000	ug/kg	140
Chrysene	ND	16000	ug/kg	58
Dibenz(a,h)anthracene	ND	16000	ug/kg	88
Fluoranthene	ND	16000	ug/kg	55
Fluorene	ND	16000	ug/kg	76
Indeno(1,2,3-cd)pyrene	ND	16000	ug/kg	120
2-Methylnaphthalene	ND	16000	ug/kg	58
Naphthalene	ND	16000	ug/kg	52
Phenanthrene	ND	16000	ug/kg	65
Pyrene	ND	16000	ug/kg	59

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51 DIL	(42 - 110)
2-Fluorobiphenyl	78 DIL	(43 - 110)
Terphenyl-d14	81 DIL	(37 - 137)
Phenol-d5	66 DIL	(25 - 115)
2-Fluorophenol	65 DIL	(11 - 116)
2,4,6-Tribromophenol	69 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-611

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-027 **Work Order #...:** HR3821AA **Matrix.....:** SO
Date Sampled...: 12/12/05 15:45 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 20 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.8 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	5700	ug/kg	20
Acenaphthylene	ND	5700	ug/kg	30
Anthracene	ND	5700	ug/kg	49
Benzo(a)anthracene	ND	5700	ug/kg	30
Benzo(a)pyrene	ND	5700	ug/kg	49
Benzo(b)fluoranthene	ND	5700	ug/kg	49
Benzo(ghi)perylene	ND	5700	ug/kg	39
Benzo(k)fluoranthene	ND	5700	ug/kg	49
Chrysene	ND	5700	ug/kg	21
Dibenz(a,h)anthracene	ND	5700	ug/kg	32
Fluoranthene	ND	5700	ug/kg	20
Fluorene	ND	5700	ug/kg	28
Indeno(1,2,3-cd)pyrene	ND	5700	ug/kg	43
2-Methylnaphthalene	ND	5700	ug/kg	21
Naphthalene	ND	5700	ug/kg	19
Phenanthrene	ND	5700	ug/kg	24
Pyrene	ND	5700	ug/kg	21

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	61 DIL	(42 - 110)
2-Fluorobiphenyl	85 DIL	(43 - 110)
Terphenyl-d14	89 DIL	(37 - 137)
Phenol-d5	77 DIL	(25 - 115)
2-Fluorophenol	78 DIL	(11 - 116)
2,4,6-Tribromophenol	86 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-612

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-028 **Work Order #...:** HR3841AA **Matrix.....:** SO
Date Sampled...: 12/12/05 16:45 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.0 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.98
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	**23 J**	**280**	**ug/kg**	**2.4**
Benzo(a)anthracene	**160 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**180 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**230 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**140 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**70 J**	**280**	**ug/kg**	**2.4**
Chrysene	**170 J**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**37 J**	**280**	**ug/kg**	**1.6**
Fluoranthene	**250 J**	**280**	**ug/kg**	**0.99**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	**120 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	**11 J**	**280**	**ug/kg**	**1.1**
Naphthalene	**7.5 J**	**280**	**ug/kg**	**0.95**
Phenanthrene	**98 J**	**280**	**ug/kg**	**1.2**
Pyrene	**210 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(42 - 110)
2-Fluorobiphenyl	73	(43 - 110)
Terphenyl-d14	77	(37 - 137)
Phenol-d5	60	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	33 *	(35 - 116)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-613

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-029 **Work Order #...:** HR3871AA **Matrix.....:** SO
Date Sampled...: 12/12/05 16:50 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.09 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.0 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.98
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	**23 J**	**280**	**ug/kg**	**2.4**
Benzo(a)anthracene	**130 J**	**280**	**ug/kg**	**1.5**
Benzo(a)pyrene	**130 J**	**280**	**ug/kg**	**2.4**
Benzo(b)fluoranthene	**200 J**	**280**	**ug/kg**	**2.4**
Benzo(ghi)perylene	**95 J**	**280**	**ug/kg**	**1.9**
Benzo(k)fluoranthene	**71 J**	**280**	**ug/kg**	**2.4**
Chrysene	**130 J**	**280**	**ug/kg**	**1.1**
Dibenz(a,h)anthracene	**26 J**	**280**	**ug/kg**	**1.6**
Fluoranthene	**210 J**	**280**	**ug/kg**	**0.99**
Fluorene	**7.3 J**	**280**	**ug/kg**	**1.4**
Indeno(1,2,3-cd)pyrene	**84 J**	**280**	**ug/kg**	**2.1**
2-Methylnaphthalene	**13 J**	**280**	**ug/kg**	**1.1**
Naphthalene	**11 J**	**280**	**ug/kg**	**0.95**
Phenanthrene	**90 J**	**280**	**ug/kg**	**1.2**
Pyrene	**180 J**	**280**	**ug/kg**	**1.1**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	72	(43 - 110)
Terphenyl-d14	76	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	66	(11 - 116)
2,4,6-Tribromophenol	38	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-614

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-030 **Work Order #...:** HR3891AA **Matrix.....:** SO
Date Sampled...: 12/12/05 16:55 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 10 **Initial Wgt/Vol:** 30.01 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 9.8 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	**370 J**	**2900**	**ug/kg**	**10**
Acenaphthylene	ND	2900	ug/kg	16
Anthracene	**750 J**	**2900**	**ug/kg**	**26**
Benzo(a)anthracene	**2000 J**	**2900**	**ug/kg**	**16**
Benzo(a)pyrene	**1900 J**	**2900**	**ug/kg**	**26**
Benzo(b)fluoranthene	**2400 J**	**2900**	**ug/kg**	**26**
Benzo(ghi)perylene	**1400 J**	**2900**	**ug/kg**	**20**
Benzo(k)fluoranthene	**1100 J**	**2900**	**ug/kg**	**26**
Chrysene	**2200 J**	**2900**	**ug/kg**	**11**
Dibenz(a,h)anthracene	**340 J**	**2900**	**ug/kg**	**17**
Fluoranthene	**4200**	**2900**	**ug/kg**	**10**
Fluorene	**430 J**	**2900**	**ug/kg**	**14**
Indeno(1,2,3-cd)pyrene	**1200 J**	**2900**	**ug/kg**	**22**
2-Methylnaphthalene	**470 J**	**2900**	**ug/kg**	**11**
Naphthalene	**510 J**	**2900**	**ug/kg**	**9.9**
Phenanthrene	**3100**	**2900**	**ug/kg**	**12**
Pyrene	**3200**	**2900**	**ug/kg**	**11**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66 DIL	(42 - 110)
2-Fluorobiphenyl	86 DIL	(43 - 110)
Terphenyl-d14	91 DIL	(37 - 137)
Phenol-d5	76 DIL	(25 - 115)
2-Fluorophenol	81 DIL	(11 - 116)
2,4,6-Tribromophenol	77 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-615

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-031 **Work Order #...:** HR39A1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 17:00 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/19/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 6.7 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.99
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.5
Benzo(a)anthracene	ND	280	ug/kg	1.5
Benzo(a)pyrene	ND	280	ug/kg	2.5
Benzo(b)fluoranthene	ND	280	ug/kg	2.5
Benzo(ghi)perylene	ND	280	ug/kg	1.9
Benzo(k)fluoranthene	ND	280	ug/kg	2.5
Chrysene	ND	280	ug/kg	1.1
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	**9.0 J**	**280**	**ug/kg**	**1.0**
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.1
Naphthalene	ND	280	ug/kg	0.95
Phenanthrene	ND	280	ug/kg	1.2
Pyrene	ND	280	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	40 *	(42 - 110)
2-Fluorobiphenyl	51	(43 - 110)
Terphenyl-d14	58	(37 - 137)
Phenol-d5	46	(25 - 115)
2-Fluorophenol	49	(11 - 116)
2,4,6-Tribromophenol	47	(35 - 116)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-616

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-032 **Work Order #...:** HR39C1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 17:02 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 5.4 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	280	ug/kg	0.97
Acenaphthylene	ND	280	ug/kg	1.5
Anthracene	ND	280	ug/kg	2.4
Benzo(a)anthracene	ND	280	ug/kg	1.5
Benzo(a)pyrene	ND	280	ug/kg	2.4
Benzo(b)fluoranthene	ND	280	ug/kg	2.4
Benzo(ghi)perylene	ND	280	ug/kg	1.9
Benzo(k)fluoranthene	ND	280	ug/kg	2.4
Chrysene	ND	280	ug/kg	1.0
Dibenz(a,h)anthracene	ND	280	ug/kg	1.6
Fluoranthene	ND	280	ug/kg	0.98
Fluorene	ND	280	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	2.1
2-Methylnaphthalene	ND	280	ug/kg	1.0
Naphthalene	ND	280	ug/kg	0.94
Phenanthrene	ND	280	ug/kg	1.2
Pyrene	ND	280	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	69	(43 - 110)
Terphenyl-d14	73	(37 - 137)
Phenol-d5	63	(25 - 115)
2-Fluorophenol	68	(11 - 116)
2,4,6-Tribromophenol	54	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-617

GC/MS Semivolatiles

Lot-Sample #...: A5L140222-033 **Work Order #...:** HR39D1AA **Matrix.....:** SO
Date Sampled...: 12/12/05 17:05 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.04 g **Final Wgt/Vol..:** 2 mL
% Moisture.....: 10 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	290	ug/kg	1.0
Acenaphthylene	ND	290	ug/kg	1.6
Anthracene	ND	290	ug/kg	2.6
Benzo(a)anthracene	ND	290	ug/kg	1.6
Benzo(a)pyrene	ND	290	ug/kg	2.6
Benzo(b)fluoranthene	ND	290	ug/kg	2.6
Benzo(ghi)perylene	ND	290	ug/kg	2.0
Benzo(k)fluoranthene	ND	290	ug/kg	2.6
Chrysene	ND	290	ug/kg	1.1
Dibenz(a,h)anthracene	ND	290	ug/kg	1.7
Fluoranthene	ND	290	ug/kg	1.0
Fluorene	ND	290	ug/kg	1.4
Indeno(1,2,3-cd)pyrene	ND	290	ug/kg	2.2
2-Methylnaphthalene	ND	290	ug/kg	1.1
Naphthalene	ND	290	ug/kg	0.99
Phenanthrene	ND	290	ug/kg	1.2
Pyrene	ND	290	ug/kg	1.1

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(42 - 110)
2-Fluorobiphenyl	67	(43 - 110)
Terphenyl-d14	76	(37 - 137)
Phenol-d5	60	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	62	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DJ1AA **Matrix.....:** SOLID
MB Lot-Sample #: A5L140000-338

Prep Date.....: 12/14/05 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 12/16/05 **Prep Batch #...:** 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	260	ug/kg	SW846 8270C
Acenaphthylene	ND	260	ug/kg	SW846 8270C
Anthracene	ND	260	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	260	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	260	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	260	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	260	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	260	ug/kg	SW846 8270C
Chrysene	ND	260	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	260	ug/kg	SW846 8270C
Fluoranthene	ND	260	ug/kg	SW846 8270C
Fluorene	ND	260	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	260	ug/kg	SW846 8270C
Naphthalene	ND	260	ug/kg	SW846 8270C
Phenanthrene	ND	260	ug/kg	SW846 8270C
Pyrene	ND	260	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(42 - 110)
2-Fluorobiphenyl	69	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	75	(25 - 115)
2-Fluorophenol	66	(11 - 116)
2,4,6-Tribromophenol	60	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DN1AA **Matrix.....:** SOLID
MB Lot-Sample #: A5L140000-339

Prep Date.....: 12/14/05 **Final Wgt/Vol..:** 2 mL
Analysis Date..: 12/16/05 **Prep Batch #...:** 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	260	ug/kg	SW846 8270C
Acenaphthylene	ND	260	ug/kg	SW846 8270C
Anthracene	ND	260	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	260	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	260	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	260	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	260	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	260	ug/kg	SW846 8270C
Chrysene	ND	260	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	260	ug/kg	SW846 8270C
Fluoranthene	ND	260	ug/kg	SW846 8270C
Fluorene	ND	260	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	260	ug/kg	SW846 8270C
Naphthalene	ND	260	ug/kg	SW846 8270C
Phenanthrene	ND	260	ug/kg	SW846 8270C
Pyrene	ND	260	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	67	(43 - 110)
Terphenyl-d14	72	(37 - 137)
Phenol-d5	63	(25 - 115)
2-Fluorophenol	68	(11 - 116)
2,4,6-Tribromophenol	71	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A5L140000-338
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 30 g

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	**670**	**540**	**ug/kg**	**81**	**SW846 8270C**
Acenaphthylene	670	520	ug/kg	78	SW846 8270C
Anthracene	670	560	ug/kg	84	SW846 8270C
Benzo(a)anthracene	670	530	ug/kg	79	SW846 8270C
Benzo(a)pyrene	670	530	ug/kg	80	SW846 8270C
Benzo(b)fluoranthene	670	570	ug/kg	85	SW846 8270C
Benzo(ghi)perylene	670	540	ug/kg	82	SW846 8270C
Benzo(k)fluoranthene	670	550	ug/kg	82	SW846 8270C
Chrysene	670	540	ug/kg	80	SW846 8270C
Dibenz(a,h)anthracene	670	560	ug/kg	83	SW846 8270C
Fluoranthene	670	590	ug/kg	89	SW846 8270C
Fluorene	670	550	ug/kg	82	SW846 8270C
Indeno(1,2,3-cd)pyrene	670	560	ug/kg	83	SW846 8270C
2-Methylnaphthalene	670	500	ug/kg	75	SW846 8270C
Naphthalene	670	450	ug/kg	68	SW846 8270C
Phenanthrene	670	550	ug/kg	82	SW846 8270C
Pyrene	**670**	**530**	**ug/kg**	**80**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(42 - 110)
2-Fluorobiphenyl	73	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	73	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	81	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DJ1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A5L140000-338
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 30 g

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**81**	**(44 - 110)**	**SW846 8270C**
Acenaphthylene	78	(55 - 110)	SW846 8270C
Anthracene	84	(57 - 116)	SW846 8270C
Benzo(a)anthracene	79	(56 - 110)	SW846 8270C
Benzo(a)pyrene	80	(56 - 115)	SW846 8270C
Benzo(b)fluoranthene	85	(54 - 116)	SW846 8270C
Benzo(ghi)perylene	82	(48 - 124)	SW846 8270C
Benzo(k)fluoranthene	82	(54 - 110)	SW846 8270C
Chrysene	80	(56 - 110)	SW846 8270C
Dibenz(a,h)anthracene	83	(50 - 129)	SW846 8270C
Fluoranthene	89	(57 - 118)	SW846 8270C
Fluorene	82	(57 - 110)	SW846 8270C
Indeno(1,2,3-cd)pyrene	83	(44 - 128)	SW846 8270C
2-Methylnaphthalene	75	(58 - 110)	SW846 8270C
Naphthalene	68	(59 - 110)	SW846 8270C
Phenanthrene	82	(56 - 110)	SW846 8270C
Pyrene	**80**	**(42 - 122)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	78	(42 - 110)
2-Fluorobiphenyl	73	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	73	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	81	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DN1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A5L140000-339
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 30 g

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Acenaphthene	**670**	**480**	**ug/kg**	**72**	**SW846 8270C**
Acenaphthylene	670	480	ug/kg	72	SW846 8270C
Anthracene	670	570	ug/kg	85	SW846 8270C
Benzo(a)anthracene	670	560	ug/kg	84	SW846 8270C
Benzo(a)pyrene	670	540	ug/kg	80	SW846 8270C
Benzo(b)fluoranthene	670	690	ug/kg	103	SW846 8270C
Benzo(ghi)perylene	670	540	ug/kg	82	SW846 8270C
Benzo(k)fluoranthene	670	410	ug/kg	62	SW846 8270C
Chrysene	670	600	ug/kg	90	SW846 8270C
Dibenz(a,h)anthracene	670	530	ug/kg	80	SW846 8270C
Fluoranthene	670	570	ug/kg	86	SW846 8270C
Fluorene	670	500	ug/kg	76	SW846 8270C
Indeno(1,2,3-cd)pyrene	670	550	ug/kg	83	SW846 8270C
2-Methylnaphthalene	670	460	ug/kg	69	SW846 8270C
Naphthalene	670	430	ug/kg	64	SW846 8270C
Phenanthrene	670	570	ug/kg	85	SW846 8270C
Pyrene	**670**	**570**	**ug/kg**	**85**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(42 - 110)
2-Fluorobiphenyl	67	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	68	(11 - 116)
2,4,6-Tribromophenol	79	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR4DN1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A5L140000-339
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Final Wgt/Vol..:** 2 mL
Initial Wgt/Vol: 30 g

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Acenaphthene	**72**	**(44 - 110)**	**SW846 8270C**
Acenaphthylene	72	(55 - 110)	SW846 8270C
Anthracene	85	(57 - 116)	SW846 8270C
Benzo(a)anthracene	84	(56 - 110)	SW846 8270C
Benzo(a)pyrene	80	(56 - 115)	SW846 8270C
Benzo(b)fluoranthene	103	(54 - 116)	SW846 8270C
Benzo(ghi)perylene	82	(48 - 124)	SW846 8270C
Benzo(k)fluoranthene	62	(54 - 110)	SW846 8270C
Chrysene	90	(56 - 110)	SW846 8270C
Dibenz(a,h)anthracene	80	(50 - 129)	SW846 8270C
Fluoranthene	86	(57 - 118)	SW846 8270C
Fluorene	76	(57 - 110)	SW846 8270C
Indeno(1,2,3-cd)pyrene	83	(44 - 128)	SW846 8270C
2-Methylnaphthalene	69	(58 - 110)	SW846 8270C
Naphthalene	64	(59 - 110)	SW846 8270C
Phenanthrene	85	(56 - 110)	SW846 8270C
Pyrene	**85**	**(42 - 122)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	51	(42 - 110)
2-Fluorobiphenyl	67	(43 - 110)
Terphenyl-d14	85	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	68	(11 - 116)
2,4,6-Tribromophenol	79	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR3771A8-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-017 HR3771A9-MSD
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	**ND**	**730**	**590**	**ug/kg**	**80**		**SW846 8270C**
	ND	**730**	**610**	**ug/kg**	**84**	**4.4**	**SW846 8270C**
Acenaphthylene	ND	730	560	ug/kg	77		SW846 8270C
	ND	730	590	ug/kg	81	5.8	SW846 8270C
Anthracene	ND	730	580	ug/kg	80		SW846 8270C
	ND	730	600	ug/kg	83	4.3	SW846 8270C
Benzo(a)anthracene	ND	730	570	ug/kg	79		SW846 8270C
	ND	730	580	ug/kg	80	1.5	SW846 8270C
Benzo(a)pyrene	ND	730	560	ug/kg	78		SW846 8270C
	ND	730	580	ug/kg	80	2.2	SW846 8270C
Benzo(b)fluoranthene	ND	730	580	ug/kg	80		SW846 8270C
	ND	730	600	ug/kg	82	2.5	SW846 8270C
Benzo(ghi)perylene	ND	730	570	ug/kg	79		SW846 8270C
	ND	730	600	ug/kg	83	4.7	SW846 8270C
Benzo(k)fluoranthene	ND	730	570	ug/kg	79		SW846 8270C
	ND	730	590	ug/kg	81	2.4	SW846 8270C
Chrysene	ND	730	570	ug/kg	79		SW846 8270C
	ND	730	580	ug/kg	80	1.6	SW846 8270C
Dibenz(a,h)anthracene	ND	730	580	ug/kg	80		SW846 8270C
	ND	730	600	ug/kg	82	2.0	SW846 8270C
Fluoranthene	ND	730	630	ug/kg	86		SW846 8270C
	ND	730	650	ug/kg	89	2.7	SW846 8270C
Fluorene	ND	730	580	ug/kg	80		SW846 8270C
	ND	730	610	ug/kg	84	5.0	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	730	590	ug/kg	81		SW846 8270C
	ND	730	610	ug/kg	84	3.6	SW846 8270C
2-Methylnaphthalene	ND	730	560	ug/kg	77		SW846 8270C
	ND	730	590	ug/kg	81	4.6	SW846 8270C
Naphthalene	ND	730	480	ug/kg	66		SW846 8270C
	ND	730	510	ug/kg	70	6.2	SW846 8270C
Phenanthrene	ND	730	580	ug/kg	80		SW846 8270C
	ND	730	620	ug/kg	85	5.9	SW846 8270C
Pyrene	**ND**	**730**	**590**	**ug/kg**	**81**		**SW846 8270C**
	ND	**730**	**600**	**ug/kg**	**83**	**2.2**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(42 - 110)
	81	(42 - 110)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR3771A8-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-017 HR3771A9-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	72	(43 - 110)
	76	(43 - 110)
Terphenyl-d14	86	(37 - 137)
	86	(37 - 137)
Phenol-d5	72	(25 - 115)
	78	(25 - 115)
2-Fluorophenol	70	(11 - 116)
	75	(11 - 116)
2,4,6-Tribromophenol	84	(35 - 116)
	75	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR3771A8-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-017 HR3771A9-MSD
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348338
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**80**	**(13 - 133)**			**SW846 8270C**
	84	**(13 - 133)**	**4.4**	**(0-44)**	**SW846 8270C**
Acenaphthylene	77	(43 - 120)			SW846 8270C
	81	(43 - 120)	5.8	(0-75)	SW846 8270C
Anthracene	80	(34 - 137)			SW846 8270C
	83	(34 - 137)	4.3	(0-83)	SW846 8270C
Benzo(a)anthracene	79	(30 - 136)			SW846 8270C
	80	(30 - 136)	1.5	(0-63)	SW846 8270C
Benzo(a)pyrene	78	(28 - 142)			SW846 8270C
	80	(28 - 142)	2.2	(0-86)	SW846 8270C
Benzo(b)fluoranthene	80	(31 - 139)			SW846 8270C
	82	(31 - 139)	2.5	(0-67)	SW846 8270C
Benzo(ghi)perylene	79	(23 - 142)			SW846 8270C
	83	(23 - 142)	4.7	(0-89)	SW846 8270C
Benzo(k)fluoranthene	79	(30 - 133)			SW846 8270C
	81	(30 - 133)	2.4	(0-84)	SW846 8270C
Chrysene	79	(28 - 139)			SW846 8270C
	80	(28 - 139)	1.6	(0-63)	SW846 8270C
Dibenz(a,h)anthracene	80	(31 - 142)			SW846 8270C
	82	(31 - 142)	2.0	(0-99)	SW846 8270C
Fluoranthene	86	(25 - 150)			SW846 8270C
	89	(25 - 150)	2.7	(0-92)	SW846 8270C
Fluorene	80	(35 - 133)			SW846 8270C
	84	(35 - 133)	5.0	(0-80)	SW846 8270C
Indeno(1,2,3-cd)pyrene	81	(20 - 147)			SW846 8270C
	84	(20 - 147)	3.6	(0-73)	SW846 8270C
2-Methylnaphthalene	77	(30 - 137)			SW846 8270C
	81	(30 - 137)	4.6	(0-79)	SW846 8270C
Naphthalene	66	(31 - 138)			SW846 8270C
	70	(31 - 138)	6.2	(0-65)	SW846 8270C
Phenanthrene	80	(24 - 145)			SW846 8270C
	85	(24 - 145)	5.9	(0-81)	SW846 8270C
Pyrene	**81**	**(10 - 218)**			**SW846 8270C**
	83	**(10 - 218)**	**2.2**	**(0-66)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	77	(42 - 110)
	81	(42 - 110)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR3771A8-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-017 HR3771A9-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	72	(43 - 110)
	76	(43 - 110)
Terphenyl-d14	86	(37 - 137)
	86	(37 - 137)
Phenol-d5	72	(25 - 115)
	78	(25 - 115)
2-Fluorophenol	70	(11 - 116)
	75	(11 - 116)
2,4,6-Tribromophenol	84	(35 - 116)
	75	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR38J1AM-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-021 HR38J1AN-MSD
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	**43**	**880**	**670**	**ug/kg**	**71**		**SW846 8270C**
	43	**890**	**690**	**ug/kg**	**73**	**2.2**	**SW846 8270C**
Acenaphthylene	ND	880	650	ug/kg	73		SW846 8270C
	ND	890	650	ug/kg	74	0.62	SW846 8270C
Anthracene	120	880	710	ug/kg	67		SW846 8270C
	120	890	770	ug/kg	74	8.8	SW846 8270C
Benzo(a)anthracene	430	880	1000	ug/kg	65		SW846 8270C
	430	890	1100	ug/kg	78	12	SW846 8270C
Benzo(a)pyrene	320	880	800	ug/kg	54		SW846 8270C
	320	890	850	ug/kg	60	6.6	SW846 8270C
Benzo(b)fluoranthene	520	880	1100	ug/kg	61		SW846 8270C
	520	890	1300	ug/kg	85	19	SW846 8270C
Benzo(ghi)perylene	250	880	770	ug/kg	58		SW846 8270C
	250	890	710	ug/kg	52	7.2	SW846 8270C
Benzo(k)fluoranthene	120	880	590	ug/kg	53		SW846 8270C
	120	890	650	ug/kg	60	9.6	SW846 8270C
Chrysene	490	880	800	ug/kg	34		SW846 8270C
	490	890	1100	ug/kg	64	28	SW846 8270C
Dibenz(a,h)anthracene	ND	880	550	ug/kg	62		SW846 8270C
	ND	890	540	ug/kg	61	1.3	SW846 8270C
Fluoranthene	810	880	1100	ug/kg	30		SW846 8270C
	810	890	1400	ug/kg	68	27	SW846 8270C
Fluorene	47	880	660	ug/kg	70		SW846 8270C
	47	890	680	ug/kg	71	2.6	SW846 8270C
Indeno(1,2,3-cd)pyrene	210	880	750	ug/kg	61		SW846 8270C
	210	890	660	ug/kg	51	12	SW846 8270C
2-Methylnaphthalene	ND	880	620	ug/kg	70		SW846 8270C
	ND	890	610	ug/kg	69	2.3	SW846 8270C
Naphthalene	ND	880	570	ug/kg	65		SW846 8270C
	ND	890	560	ug/kg	63	2.2	SW846 8270C
Phenanthrene	630	880	1000	ug/kg	45		SW846 8270C
	630	890	1300	ug/kg	75	23	SW846 8270C
Pyrene	**640**	**880**	**980**	**ug/kg**	**38**		**SW846 8270C**
	640	**890**	**1200**	**ug/kg**	**66**	**23**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(42 - 110)
	50	(42 - 110)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR38J1AM-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-021 HR38J1AN-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	70	(43 - 110)
	68	(43 - 110)
Terphenyl-d14	74	(37 - 137)
	74	(37 - 137)
Phenol-d5	61	(25 - 115)
	61	(25 - 115)
2-Fluorophenol	65	(11 - 116)
	61	(11 - 116)
2,4,6-Tribromophenol	78	(35 - 116)
	73	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR38J1AM-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-021 HR38J1AN-MSD
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
Prep Date.....: 12/14/05 **Analysis Date..:** 12/16/05
Prep Batch #...: 5348339
Dilution Factor: 1 **Initial Wgt/Vol:** 30.2 g **Final Wgt/Vol..:** 2 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**71**	**(13 - 133)**			**SW846 8270C**
	73	**(13 - 133)**	**2.2**	**(0-44)**	**SW846 8270C**
Acenaphthylene	73	(43 - 120)			SW846 8270C
	74	(43 - 120)	0.62	(0-75)	SW846 8270C
Anthracene	67	(34 - 137)			SW846 8270C
	74	(34 - 137)	8.8	(0-83)	SW846 8270C
Benzo(a)anthracene	65	(30 - 136)			SW846 8270C
	78	(30 - 136)	12	(0-63)	SW846 8270C
Benzo(a)pyrene	54	(28 - 142)			SW846 8270C
	60	(28 - 142)	6.6	(0-86)	SW846 8270C
Benzo(b)fluoranthene	61	(31 - 139)			SW846 8270C
	85	(31 - 139)	19	(0-67)	SW846 8270C
Benzo(ghi)perylene	58	(23 - 142)			SW846 8270C
	52	(23 - 142)	7.2	(0-89)	SW846 8270C
Benzo(k)fluoranthene	53	(30 - 133)			SW846 8270C
	60	(30 - 133)	9.6	(0-84)	SW846 8270C
Chrysene	34	(28 - 139)			SW846 8270C
	64	(28 - 139)	28	(0-63)	SW846 8270C
Dibenz(a,h)anthracene	62	(31 - 142)			SW846 8270C
	61	(31 - 142)	1.3	(0-99)	SW846 8270C
Fluoranthene	30	(25 - 150)			SW846 8270C
	68	(25 - 150)	27	(0-92)	SW846 8270C
Fluorene	70	(35 - 133)			SW846 8270C
	71	(35 - 133)	2.6	(0-80)	SW846 8270C
Indeno(1,2,3-cd)pyrene	61	(20 - 147)			SW846 8270C
	51	(20 - 147)	12	(0-73)	SW846 8270C
2-Methylnaphthalene	70	(30 - 137)			SW846 8270C
	69	(30 - 137)	2.3	(0-79)	SW846 8270C
Naphthalene	65	(31 - 138)			SW846 8270C
	63	(31 - 138)	2.2	(0-65)	SW846 8270C
Phenanthrene	45	(24 - 145)			SW846 8270C
	75	(24 - 145)	23	(0-81)	SW846 8270C
Pyrene	**38**	**(10 - 218)**			**SW846 8270C**
	66	**(10 - 218)**	**23**	**(0-66)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(42 - 110)
	50	(42 - 110)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: 5L14222 **Work Order #...:** HR38J1AM-MS **Matrix.....:** SO
MS Lot-Sample #: A5L140222-021 HR38J1AN-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	70	(43 - 110)
	68	(43 - 110)
Terphenyl-d14	74	(37 - 137)
	74	(37 - 137)
Phenol-d5	61	(25 - 115)
	61	(25 - 115)
2-Fluorophenol	65	(11 - 116)
	61	(11 - 116)
2,4,6-Tribromophenol	78	(35 - 116)
	73	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

METALS DATA

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-585

TOTAL Metals

Lot-Sample #...: A5L140222-001 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:35 **Date Received..:** 12/14/05
% Moisture.....: 1.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.41	mg/kg	SW846 6010B	12/15-12/16/05	HR36E1AE
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.29		
Arsenic	**0.64**	**0.41**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR36E1AG**
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.35		
Barium	**19.7**	**0.81**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR36E1AD**
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.20		
Cadmium	**0.051 B**	**0.081**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR36E1AF**
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.027		
Chromium	**14.4**	**0.41**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR36E1AJ**
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.13		
Mercury	ND	0.041	mg/kg	SW846 7471A	12/15/05	HR36E1AC
		Dilution Factor: 1		Analysis Time..: 12:51	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.013		
Lead	**50.9**	**0.24**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR36E1AK**
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.24		
Selenium	ND	0.41	mg/kg	SW846 6010B	12/15-12/16/05	HR36E1AH
		Dilution Factor: 1		Analysis Time..: 03:10	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.30		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-586

TOTAL Metals

Lot-Sample #...: A5L140222-002 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:40 **Date Received..:** 12/14/05
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	**31.1**	**9.1**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AE**
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 6.6		
Arsenic	**29.4**	**9.1**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AG**
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 7.7		
Barium	**559**	**0.91**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AD**
		Dilution Factor: 1		Analysis Time..: 03:14	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.23		
Cadmium	**38.1**	**1.8**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AF**
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.61		
Chromium	**4970**	**9.1**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AJ**
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 3.0		
Mercury	ND	0.045	mg/kg	SW846 7471A	12/15/05	HR37E1AC
		Dilution Factor: 1		Analysis Time..: 12:52	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.015		
Lead	**3710**	**5.4**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37E1AK**
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 5.4		
Selenium	ND G	9.1	mg/kg	SW846 6010B	12/15-12/16/05	HR37E1AH
		Dilution Factor: 20		Analysis Time..: 08:27	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 6.8		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-587

TOTAL Metals

Lot-Sample #...: A5L140222-003 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:45 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37F1AE
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.1**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37F1AG**
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**14.8**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37F1AD**
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.10**	**0.086**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37F1AF**
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**46.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37F1AJ**
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR37F1AC
		Dilution Factor: 1		Analysis Time..: 12:56	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**18.5**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37F1AK**
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37F1AH
		Dilution Factor: 1		Analysis Time..: 03:19	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-588

TOTAL Metals

Lot-Sample #...: A5L140222-004 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:47 **Date Received..:** 12/14/05
% Moisture.....: 5.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37G1AE
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.6**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37G1AG**
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**6.4**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37G1AD**
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.057 B**	**0.085**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37G1AF**
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**12.0**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37G1AJ**
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR37G1AC
		Dilution Factor: 1		Analysis Time..: 12:57	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**10.3**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37G1AK**
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37G1AH
		Dilution Factor: 1		Analysis Time..: 03:23	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-589

TOTAL Metals

Lot-Sample #...: A5L140222-005 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:50 **Date Received..:** 12/14/05
% Moisture.....: 4.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37J1AE
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.30		
Arsenic	**1.2**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37J1AG**
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**4.3**	**0.84**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37J1AD**
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.084	mg/kg	SW846 6010B	12/15-12/16/05	HR37J1AF
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.028		
Chromium	**11.1**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37J1AJ**
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.017 B**	**0.042**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR37J1AC**
		Dilution Factor: 1		Analysis Time..: 12:58	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**4.6**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37J1AK**
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37J1AH
		Dilution Factor: 1		Analysis Time..: 03:28	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-590

TOTAL Metals

Lot-Sample #...: A5L140222-006 **Matrix.....:** SO
Date Sampled...: 12/12/05 10:55 **Date Received..:** 12/14/05
% Moisture.....: 6.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37L1AE
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**0.80**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37L1AG**
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**6.6**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37L1AD**
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.037 B**	**0.085**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37L1AF**
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**9.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37L1AJ**
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.020 B**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR37L1AC**
		Dilution Factor: 1		Analysis Time..: 12:59	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**5.6**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37L1AK**
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37L1AH
		Dilution Factor: 1		Analysis Time..: 03:33	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-591

TOTAL Metals

Lot-Sample #...: A5L140222-007 **Matrix.....:** SO
Date Sampled...: 12/12/05 11:35 **Date Received..:** 12/14/05
% Moisture.....: 4.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37N1AE
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.30		
Arsenic	**1.9**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37N1AG**
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.35		
Barium	**13.7**	**0.83**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37N1AD**
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.069 B**	**0.083**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37N1AF**
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.028		
Chromium	**7.4**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37N1AJ**
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR37N1AC
		Dilution Factor: 1		Analysis Time..: 13:00	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**5.2**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37N1AK**
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37N1AH
		Dilution Factor: 1		Analysis Time..: 03:37	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-592

TOTAL Metals

Lot-Sample #...: A5L140222-008 **Matrix.....:** SO
Date Sampled...: 12/12/05 11:40 **Date Received..:** 12/14/05
% Moisture.....: 7.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37P1AE
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**0.90**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37P1AG**
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**6.5**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37P1AD**
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	ND	0.086	mg/kg	SW846 6010B	12/15-12/16/05	HR37P1AF
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**4.8**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37P1AJ**
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR37P1AC
		Dilution Factor: 1		Analysis Time..: 13:02	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**1.6**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37P1AK**
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37P1AH
		Dilution Factor: 1		Analysis Time..: 03:42	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-593

TOTAL Metals

Lot-Sample #...: A5L140222-009 **Matrix.....:** SO
Date Sampled...: 12/12/05 11:50 **Date Received..:** 12/14/05
% Moisture.....: 6.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37Q1AE
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**0.53**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37Q1AG**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**4.6**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37Q1AD**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.085	mg/kg	SW846 6010B	12/15-12/16/05	HR37Q1AF
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**3.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37Q1AJ**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR37Q1AC
		Dilution Factor: 1		Analysis Time..: 13:03	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**0.99**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37Q1AK**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37Q1AH
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-594

TOTAL Metals

Lot-Sample #...: A5L140222-010 **Matrix.....:** SO
Date Sampled...: 12/12/05 12:20 **Date Received..:** 12/14/05
% Moisture.....: 5.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37T1AE
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.5**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37T1AG**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**33.6**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37T1AD**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.13**	**0.085**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37T1AF**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**6.3**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37T1AJ**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR37T1AC
		Dilution Factor: 1		Analysis Time..: 13:04	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**7.6**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37T1AK**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37T1AH
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-595

TOTAL Metals

Lot-Sample #...: A5L140222-011 **Matrix.....:** SO
Date Sampled...: 12/12/05 12:30 **Date Received..:** 12/14/05
% Moisture.....: 5.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37V1AE
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.0**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37V1AG**
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**5.7**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37V1AD**
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.085	mg/kg	SW846 6010B	12/15-12/16/05	HR37V1AF
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**5.8**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37V1AJ**
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR37V1AC
		Dilution Factor: 1		Analysis Time..: 13:05	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**2.0**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37V1AK**
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37V1AH
		Dilution Factor: 1		Analysis Time..: 04:08	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-596

TOTAL Metals

Lot-Sample #...: A5L140222-012 **Matrix.....:** SO
Date Sampled...: 12/12/05 12:35 **Date Received..:** 12/14/05
% Moisture.....: 4.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37W1AE
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.30		
Arsenic	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37W1AG
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**3.2**	**0.84**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37W1AD**
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.084	mg/kg	SW846 6010B	12/15-12/16/05	HR37W1AF
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.028		
Chromium	**3.0**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37W1AJ**
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR37W1AC
		Dilution Factor: 1		Analysis Time..: 13:06	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**1.2**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37W1AK**
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR37W1AH
		Dilution Factor: 1		Analysis Time..: 04:13	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-597

TOTAL Metals

Lot-Sample #...: A5L140222-013 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:30 **Date Received..:** 12/14/05
% Moisture.....: 7.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349026						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37X1AE
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**2.9**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37X1AG**
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**88.0**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37X1AD**
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**0.58**	**0.086**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37X1AF**
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**15.1**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37X1AJ**
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR37X1AC
		Dilution Factor: 1		Analysis Time..: 13:10	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**24.8**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR37X1AK**
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR37X1AH
		Dilution Factor: 1		Analysis Time..: 04:18	Analyst ID.....: 001644	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-598

TOTAL Metals

Lot-Sample #...: A5L140222-014 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:40 **Date Received..:** 12/14/05
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.46	mg/kg	SW846 6010B	12/15-12/16/05	HR3701AE
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		
Arsenic	**3.2**	**0.46**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3701AG**
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.39		
Barium	**64.8**	**0.91**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3701AD**
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.23		
Cadmium	**0.37**	**0.091**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3701AF**
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.031		
Chromium	**13.2**	**0.46**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3701AJ**
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.15		
Mercury	ND	0.046	mg/kg	SW846 7471A	12/15/05	HR3701AC
		Dilution Factor: 1		Analysis Time..: 13:17	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.015		
Lead	**17.5**	**0.27**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3701AK**
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.27		
Selenium	ND	0.46	mg/kg	SW846 6010B	12/15-12/16/05	HR3701AH
		Dilution Factor: 1		Analysis Time..: 19:16	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.34		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-599

TOTAL Metals

Lot-Sample #...: A5L140222-015 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:45 **Date Received..:** 12/14/05
% Moisture.....: 6.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3721AE
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**0.72**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3721AG**
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**8.1**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3721AD**
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.086	mg/kg	SW846 6010B	12/15-12/16/05	HR3721AF
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**3.9**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3721AJ**
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR3721AC
		Dilution Factor: 1		Analysis Time..: 13:18	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**2.9**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3721AK**
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3721AH
		Dilution Factor: 1		Analysis Time..: 19:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-600

TOTAL Metals

Lot-Sample #...: A5L140222-016 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:50 **Date Received..:** 12/14/05
% Moisture.....: 8.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.44	mg/kg	SW846 6010B	12/15-12/16/05	HR3731AE
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		
Arsenic	**1.8**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3731AG**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**9.4**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3731AD**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	ND	0.087	mg/kg	SW846 6010B	12/15-12/16/05	HR3731AF
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**9.2**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3731AJ**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.044	mg/kg	SW846 7471A	12/15/05	HR3731AC
		Dilution Factor: 1		Analysis Time..: 13:20	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**3.0**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3731AK**
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.44	mg/kg	SW846 6010B	12/15-12/16/05	HR3731AH
		Dilution Factor: 1		Analysis Time..: 19:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-601

TOTAL Metals

Lot-Sample #...: A5L140222-017 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
% Moisture.....: 8.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.44	mg/kg	SW846 6010B	12/15-12/16/05	HR3771AL
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		
Arsenic	**0.84**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3771AT**
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**7.5**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3771AH**
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**0.037 B**	**0.087**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3771AP**
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**6.2**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3771A1**
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.044	mg/kg	SW846 7471A	12/15/05	HR3771AE
		Dilution Factor: 1		Analysis Time..: 13:21	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**2.6**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3771A4**
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.44	mg/kg	SW846 6010B	12/15-12/16/05	HR3771AW
		Dilution Factor: 1		Analysis Time..: 19:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-602

TOTAL Metals

Lot-Sample #...: A5L140222-018 **Matrix.....:** SO
Date Sampled...: 12/12/05 14:25 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38D1AE
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**5.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AG**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**66.4**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AD**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.56**	**0.086**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AF**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**24.5**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AJ**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.033 B**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38D1AC**
		Dilution Factor: 1		Analysis Time..: 13:33	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**39.6**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AK**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	**0.48**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38D1AH**
		Dilution Factor: 1		Analysis Time..: 19:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-603

TOTAL Metals

Lot-Sample #...: A5L140222-019 **Matrix.....:** SO
Date Sampled...: 12/12/05 14:30 **Date Received..:** 12/14/05
% Moisture.....: 6.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38F1AE
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**2.6**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38F1AG**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**81.3**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38F1AD**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.41**	**0.086**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38F1AF**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**21.4**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38F1AJ**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.028 B**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38F1AC**
		Dilution Factor: 1		Analysis Time..: 13:35	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**235**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38F1AK**
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38F1AH
		Dilution Factor: 1		Analysis Time..: 19:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-604

TOTAL Metals

Lot-Sample #...: A5L140222-020 **Matrix.....:** SO
Date Sampled...: 12/12/05 14:35 **Date Received..:** 12/14/05
% Moisture.....: 11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	**15.3**	**4.5**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AE**
		Dilution Factor: 10		Analysis Time..: 20:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		
Arsenic	**23.7**	**4.5**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AG**
		Dilution Factor: 10		Analysis Time..: 20:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.8		
Barium	**472**	**0.90**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AD**
		Dilution Factor: 1		Analysis Time..: 20:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**7.8**	**0.90**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AF**
		Dilution Factor: 10		Analysis Time..: 20:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.30		
Chromium	**2800**	**0.45**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AJ**
		Dilution Factor: 1		Analysis Time..: 20:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.15		
Mercury	**0.015 B**	**0.045**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38H1AC**
		Dilution Factor: 1		Analysis Time..: 13:36	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.015		
Lead	**5410**	**2.7**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38H1AK**
		Dilution Factor: 10		Analysis Time..: 20:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.7		
Selenium	ND G	4.5	mg/kg	SW846 6010B	12/15-12/16/05	HR38H1AH
		Dilution Factor: 10		Analysis Time..: 20:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.4		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-605

TOTAL Metals

Lot-Sample #...: A5L140222-021 **Matrix.....:** SO
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
% Moisture.....: 25

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	**5.2**	**0.53**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AE**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.39		
Arsenic	**5.8**	**0.53**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AG**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.45		
Barium	**175**	**1.1**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AD**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.27		
Cadmium	**2.5**	**0.11**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AF**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.036		
Chromium	**768**	**0.53**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AJ**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.17		
Mercury	**0.024 B**	**0.053**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38J1AC**
		Dilution Factor: 1		Analysis Time..: 13:39	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.017		
Lead	**371**	**0.32**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AK**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		
Selenium	**0.77**	**0.53**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38J1AH**
		Dilution Factor: 1		Analysis Time..: 20:20	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.40		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-606

TOTAL Metals

Lot-Sample #...: A5L140222-022 **Matrix.....:** SO
Date Sampled...: 12/12/05 14:45 **Date Received..:** 12/14/05
% Moisture.....: 7.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38N1AE
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.2**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38N1AG**
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**14.5**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38N1AD**
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	ND	0.087	mg/kg	SW846 6010B	12/15-12/16/05	HR38N1AF
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**8.4**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38N1AJ**
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR38N1AC
		Dilution Factor: 1		Analysis Time..: 13:41	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**4.0**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38N1AK**
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38N1AH
		Dilution Factor: 1		Analysis Time..: 20:25	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-607

TOTAL Metals

Lot-Sample #...: A5L140222-023 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:25 **Date Received..:** 12/14/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	**1.5**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AE**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.34		
Arsenic	**18.5**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AG**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.40		
Barium	**608**	**0.94**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AD**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.23		
Cadmium	**4.5**	**0.094**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AF**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.032		
Chromium	**577**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AJ**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.15		
Mercury	**0.18**	**0.047**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38R1AC**
		Dilution Factor: 1		Analysis Time..: 13:42	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.015		
Lead	**575**	**0.28**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AK**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.28		
Selenium	**1.7**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38R1AH**
		Dilution Factor: 1		Analysis Time..: 20:29	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.35		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-608

TOTAL Metals

Lot-Sample #...: A5L140222-024 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:30 **Date Received..:** 12/14/05
% Moisture.....: 7.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR38T1AE
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**4.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AG**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.37		
Barium	**287**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AD**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**0.39**	**0.087**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AF**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**49.1**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AJ**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.044**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR38T1AC**
		Dilution Factor: 1		Analysis Time..: 13:43	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**46.0**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AK**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	**0.36 B**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38T1AH**
		Dilution Factor: 1		Analysis Time..: 20:34	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-609

TOTAL Metals

Lot-Sample #...: A5L140222-025 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:35 **Date Received..:** 12/14/05
% Moisture.....: 8.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND G	4.4	mg/kg	SW846 6010B	12/15-12/16/05	HR38W1AE
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.2		
Arsenic	**22.4**	**4.4**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38W1AG**
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.7		
Barium	**21.6**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38W1AD**
		Dilution Factor: 1		Analysis Time..: 20:38	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**0.77 B,G**	**0.87**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38W1AF**
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.29		
Chromium	**184**	**4.4**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38W1AJ**
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 1.4		
Mercury	ND	0.044	mg/kg	SW846 7471A	12/15/05	HR38W1AC
		Dilution Factor: 1		Analysis Time..: 13:44	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**24.0**	**2.6**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR38W1AK**
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 2.6		
Selenium	ND G	4.4	mg/kg	SW846 6010B	12/15-12/16/05	HR38W1AH
		Dilution Factor: 10		Analysis Time..: 20:44	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 3.3		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-610

TOTAL Metals

Lot-Sample #...: A5L140222-026 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:40 **Date Received..:** 12/14/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.47	mg/kg	SW846 6010B	12/15-12/16/05	HR3801AE
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.34		
Arsenic	**1.2**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3801AG**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.40		
Barium	**13.4**	**0.94**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3801AD**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.23		
Cadmium	**0.058 B**	**0.094**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3801AF**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.032		
Chromium	**8.6**	**0.47**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3801AJ**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.15		
Mercury	ND	0.047	mg/kg	SW846 7471A	12/15/05	HR3801AC
		Dilution Factor: 1		Analysis Time..: 13:27	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.015		
Lead	**4.7**	**0.28**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3801AK**
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.28		
Selenium	ND	0.47	mg/kg	SW846 6010B	12/15-12/16/05	HR3801AH
		Dilution Factor: 1		Analysis Time..: 20:48	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.35		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-611

TOTAL Metals

Lot-Sample #...: A5L140222-027 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:45 **Date Received..:** 12/14/05
% Moisture.....: 6.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3821AE
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**0.73**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3821AG**
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**4.7**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3821AD**
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.086	mg/kg	SW846 6010B	12/15-12/16/05	HR3821AF
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**5.9**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3821AJ**
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR3821AC
		Dilution Factor: 1		Analysis Time..: 13:28	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**3.2**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3821AK**
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3821AH
		Dilution Factor: 1		Analysis Time..: 20:53	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-612

TOTAL Metals

Lot-Sample #...: A5L140222-028 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:45 **Date Received..:** 12/14/05
% Moisture.....: 6.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3841AE
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**2.3**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3841AG**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**17.8**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3841AD**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.21**	**0.085**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3841AF**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**26.0**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3841AJ**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.016 B**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR3841AC**
		Dilution Factor: 1		Analysis Time..: 13:29	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**8.6**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3841AK**
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3841AH
		Dilution Factor: 1		Analysis Time..: 21:10	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-613

TOTAL Metals

Lot-Sample #...: A5L140222-029 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:50 **Date Received..:** 12/14/05
% Moisture.....: 6.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3871AE
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**2.2**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3871AG**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**13.7**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3871AD**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	**0.16**	**0.085**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3871AF**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**12.1**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3871AJ**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.022 B**	**0.043**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR3871AC**
		Dilution Factor: 1		Analysis Time..: 13:31	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**6.8**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3871AK**
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR3871AH
		Dilution Factor: 1		Analysis Time..: 21:15	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-614

TOTAL Metals

Lot-Sample #...: A5L140222-030 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:55 **Date Received..:** 12/14/05
% Moisture.....: 9.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	**3.0**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AE**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		
Arsenic	**5.4**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AG**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.38		
Barium	**91.1**	**0.89**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AD**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**2.3**	**0.089**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AF**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.030		
Chromium	**341**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AJ**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.017 B**	**0.044**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR3891AC**
		Dilution Factor: 1		Analysis Time..: 13:32	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**75.2**	**0.27**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AK**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.27		
Selenium	**0.60**	**0.44**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR3891AH**
		Dilution Factor: 1		Analysis Time..: 21:19	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-615

TOTAL Metals

Lot-Sample #...: A5L140222-031 **Matrix.....:** SO
Date Sampled...: 12/12/05 17:00 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR39A1AE
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.2**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39A1AG**
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**7.4**	**0.86**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39A1AD**
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.086	mg/kg	SW846 6010B	12/15-12/16/05	HR39A1AF
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**4.8**	**0.43**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39A1AJ**
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.043	mg/kg	SW846 7471A	12/15/05	HR39A1AC
		Dilution Factor: 1		Analysis Time..: 13:45	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**1.8**	**0.26**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39A1AK**
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.26		
Selenium	ND	0.43	mg/kg	SW846 6010B	12/15-12/16/05	HR39A1AH
		Dilution Factor: 1		Analysis Time..: 21:24	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-616

TOTAL Metals

Lot-Sample #...: A5L140222-032 **Matrix.....:** SO
Date Sampled...: 12/12/05 17:02 **Date Received..:** 12/14/05
% Moisture.....: 5.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR39C1AE
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.31		
Arsenic	**1.0**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39C1AG**
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.36		
Barium	**3.7**	**0.85**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39C1AD**
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.21		
Cadmium	ND	0.085	mg/kg	SW846 6010B	12/15-12/16/05	HR39C1AF
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.029		
Chromium	**4.2**	**0.42**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39C1AJ**
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	ND	0.042	mg/kg	SW846 7471A	12/15/05	HR39C1AC
		Dilution Factor: 1		Analysis Time..: 13:47	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**1.9**	**0.25**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39C1AK**
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.25		
Selenium	ND	0.42	mg/kg	SW846 6010B	12/15-12/16/05	HR39C1AH
		Dilution Factor: 1		Analysis Time..: 21:28	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-617

TOTAL Metals

Lot-Sample #...: A5L140222-033 **Matrix.....:** SO
Date Sampled...: 12/12/05 17:05 **Date Received..:** 12/14/05
% Moisture.....: 10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5349027						
Silver	ND	0.45	mg/kg	SW846 6010B	12/15-12/16/05	HR39D1AE
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.32		
Arsenic	**0.68**	**0.45**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39D1AG**
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.38		
Barium	**5.0**	**0.89**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39D1AD**
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.22		
Cadmium	**0.034 B**	**0.089**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39D1AF**
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.030		
Chromium	**3.8**	**0.45**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39D1AJ**
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.14		
Mercury	**0.024 B**	**0.045**	**mg/kg**	**SW846 7471A**	**12/15/05**	**HR39D1AC**
		Dilution Factor: 1		Analysis Time..: 13:48	Analyst ID.....: 001086	
		Instrument ID..: H1		MDL.....: 0.014		
Lead	**1.9**	**0.27**	**mg/kg**	**SW846 6010B**	**12/15-12/16/05**	**HR39D1AK**
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.27		
Selenium	ND	0.45	mg/kg	SW846 6010B	12/15-12/16/05	HR39D1AH
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 001637	
		Instrument ID..: I5		MDL.....: 0.33		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5L150000-026 **Prep Batch #...:** 5349026						
Arsenic	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CD
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Barium	ND	0.80	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1A9
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Cadmium	ND	0.080	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CC
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Chromium	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CF
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Lead	ND	0.24	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CG
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Mercury	ND	0.040	mg/kg	SW846 7471A	12/15/05	HR5NM1A8
		Dilution Factor: 1				
		Analysis Time..: 12:41	Analyst ID.....: 001086	Instrument ID..: H1		
Selenium	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CE
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
Silver	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NM1CA
		Dilution Factor: 1				
		Analysis Time..: 02:19	Analyst ID.....: 001644	Instrument ID..: I5		
MB Lot-Sample #: A5L150000-027 **Prep Batch #...:** 5349027						
Arsenic	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AF
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637	Instrument ID..: I5		
Barium	ND	0.80	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AC
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637	Instrument ID..: I5		

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cadmium	ND	0.080	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AE
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637		Instrument ID..: I5	
Chromium	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AH
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637		Instrument ID..: I5	
Lead	ND	0.24	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AJ
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637		Instrument ID..: I5	
Mercury	ND	0.040	mg/kg	SW846 7471A	12/15/05	HR5NP1AA
		Dilution Factor: 1				
		Analysis Time..: 13:15	Analyst ID.....: 001086		Instrument ID..: H1	
Selenium	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AG
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637		Instrument ID..: I5	
Silver	ND	0.40	mg/kg	SW846 6010B	12/15-12/16/05	HR5NP1AD
		Dilution Factor: 1				
		Analysis Time..: 18:54	Analyst ID.....: 001637		Instrument ID..: I5	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5L150000-026 **Prep Batch #...:** 5349026							
Arsenic	200	173	mg/kg	86	SW846 6010B	12/15-12/16/05	HR5NM1AT
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Cadmium	5.0	4.5	mg/kg	90	SW846 6010B	12/15-12/16/05	HR5NM1AU
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Lead	50.0	45.3	mg/kg	91	SW846 6010B	12/15-12/16/05	HR5NM1AV
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Selenium	200	178	mg/kg	89	SW846 6010B	12/15-12/16/05	HR5NM1AW
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Silver	5.0	5.0	mg/kg	101	SW846 6010B	12/15-12/16/05	HR5NM1AX
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Chromium	20.0	18.1	mg/kg	90	SW846 6010B	12/15-12/16/05	HR5NM1A0
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
Mercury	0.83	0.74	mg/kg	89	SW846 7471A	12/15/05	HR5NM1A7
			Dilution Factor: 1		Analysis Time..: 12:42	Analyst ID.....: 001086	
			Instrument ID..: H1				
Barium	200	178	mg/kg	89	SW846 6010B	12/15-12/16/05	HR5NM1CL
			Dilution Factor: 1		Analysis Time..: 02:23	Analyst ID.....: 001644	
			Instrument ID..: I5				
LCS Lot-Sample#: A5L150000-027 **Prep Batch #...:** 5349027							
Mercury	0.83	0.79	mg/kg	94	SW846 7471A	12/15/05	HR5NP1AK
			Dilution Factor: 1		Analysis Time..: 13:16	Analyst ID.....: 001086	
			Instrument ID..: H1				
Barium	200	184	mg/kg	92	SW846 6010B	12/15-12/16/05	HR5NP1AL
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	5.0	5.1	mg/kg	101	SW846 6010B	12/15-12/16/05	HR5NP1AM
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				
Cadmium	5.0	4.6	mg/kg	93	SW846 6010B	12/15-12/16/05	HR5NP1AN
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				
Arsenic	200	176	mg/kg	88	SW846 6010B	12/15-12/16/05	HR5NP1AP
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				
Selenium	200	186	mg/kg	93	SW846 6010B	12/15-12/16/05	HR5NP1AQ
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				
Chromium	20.0	18.9	mg/kg	95	SW846 6010B	12/15-12/16/05	HR5NP1AR
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				
Lead	50.0	47.2	mg/kg	94	SW846 6010B	12/15-12/16/05	HR5NP1AT
			Dilution Factor: 1		Analysis Time..: 19:11	Analyst ID.....: 001637	
			Instrument ID..: I5				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5L150000-026 **Prep Batch #...:** 5349026					
Arsenic	86	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1AT
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Cadmium	90	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1AU
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Lead	91	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1AV
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Selenium	89	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1AW
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Silver	101	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1AX
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Chromium	90	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1A0
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
Mercury	89	(73 - 123)	SW846 7471A	12/15/05	HR5NM1A7
		Dilution Factor: 1	Analysis Time..: 12:42	Analyst ID.....: 001086	
		Instrument ID..: H1			
Barium	89	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NM1CL
		Dilution Factor: 1	Analysis Time..: 02:23	Analyst ID.....: 001644	
		Instrument ID..: I5			
LCS Lot-Sample#: A5L150000-027 **Prep Batch #...:** 5349027					
Mercury	94	(73 - 123)	SW846 7471A	12/15/05	HR5NP1AK
		Dilution Factor: 1	Analysis Time..: 13:16	Analyst ID.....: 001086	
		Instrument ID..: H1			
Barium	92	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AL
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	101	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AM
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			
Cadmium	93	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AN
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			
Arsenic	88	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AP
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			
Selenium	93	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AQ
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			
Chromium	95	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AR
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			
Lead	94	(80 - 120)	SW846 6010B	12/15-12/16/05	HR5NP1AT
		Dilution Factor: 1	Analysis Time..: 19:11	Analyst ID.....: 001637	
		Instrument ID..: I5			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID
Date Sampled...: 12/13/05 17:10 **Date Received..:** 12/14/05

MS Lot-Sample #: A5L140150-004 **Prep Batch #...:** 5349026
% Moisture.....: 15

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic									
	8.7	236	212	mg/kg	86		SW846 6010B	12/15-12/16/05	HR3FT1DG
	8.7	236	195	mg/kg	79	8.0	SW846 6010B	12/15-12/16/05	HR3FT1DH
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	
Barium									
	56.4	236	263	mg/kg	87		SW846 6010B	12/15-12/16/05	HR3FT1C6
	56.4	236	263	mg/kg	88	0.08	SW846 6010B	12/15-12/16/05	HR3FT1C7
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	
Cadmium									
	0.33	5.9	4.8	mg/kg	76		SW846 6010B	12/15-12/16/05	HR3FT1DD
	0.33	5.9	4.9	mg/kg	78	1.8	SW846 6010B	12/15-12/16/05	HR3FT1DE
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	
Chromium									
	13.5	23.6	35.8	mg/kg	95		SW846 6010B	12/15-12/16/05	HR3FT1DN
	13.5	23.6	37.0	mg/kg	100	3.2	SW846 6010B	12/15-12/16/05	HR3FT1DP
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	
Lead									
	16.3	58.9	70.7	mg/kg	92		SW846 6010B	12/15-12/16/05	HR3FT1DR
	16.3	58.9	75.2	mg/kg	100	6.1	SW846 6010B	12/15-12/16/05	HR3FT1DT
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	
Mercury									
	0.10	0.20	0.25	mg/kg	74		SW846 7471A	12/15/05	HR3FT1C3
	0.10	0.20	0.23	mg/kg	64	7.9	SW846 7471A	12/15/05	HR3FT1C4
			Dilution Factor: 1						
			Analysis Time..: 12:49		Instrument ID..: H1			Analyst ID.....: 001086	
Selenium									
	ND	236	184	mg/kg	78		SW846 6010B	12/15-12/16/05	HR3FT1DK
	ND	236	190	mg/kg	81	3.0	SW846 6010B	12/15-12/16/05	HR3FT1DL
			Dilution Factor: 1						
			Analysis Time..: 03:00		Instrument ID..: I5			Analyst ID.....: 001644	

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID
Date Sampled...: 12/13/05 17:10 **Date Received..:** 12/14/05

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver									
	ND	5.9	5.6	mg/kg	95		SW846 6010B	12/15-12/16/05	HR3FT1C9
	ND	5.9	5.6	mg/kg	95	0.52	SW846 6010B	12/15-12/16/05	HR3FT1DA

Dilution Factor: 1
Analysis Time..: 03:00 Instrument ID..: I5 Analyst ID.....: 001644

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SOLID
Date Sampled...: 12/13/05 17:10 **Date Received..:** 12/14/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5L140150-004 **Prep Batch #...:** 5349026						**% Moisture.....:** 15	
Arsenic	86	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1DG
	79	(75 - 125)	8.0	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DH
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Barium	87	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1C6
	88	(75 - 125)	0.08	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1C7
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Cadmium	76	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1DD
	78	(75 - 125)	1.8	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DE
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Chromium	95	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1DN
	100	(75 - 125)	3.2	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DP
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Lead	92	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1DR
	100	(75 - 125)	6.1	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DT
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Mercury	74	(10 - 199)			SW846 7471A	12/15/05	HR3FT1C3
	64	(10 - 199)	7.9	(0-50)	SW846 7471A	12/15/05	HR3FT1C4
		Dilution Factor: 1					
		Analysis Time..: 12:49			Instrument ID..: H1	Analyst ID.....: 001086	
Selenium	78	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1DK
	81	(75 - 125)	3.0	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DL
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	
Silver	95	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3FT1C9
	95	(75 - 125)	0.52	(0-20)	SW846 6010B	12/15-12/16/05	HR3FT1DA
		Dilution Factor: 1					
		Analysis Time..: 03:00			Instrument ID..: I5	Analyst ID.....: 001644	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5L140222-017 **Prep Batch #...:** 5349027									
Arsenic									
	0.84	218	190	mg/kg	87		SW846 6010B	12/15-12/16/05	HR3771AU
	0.84	218	181	mg/kg	83	4.8	SW846 6010B	12/15-12/16/05	HR3771AV
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		
Barium									
	7.5	218	209	mg/kg	92		SW846 6010B	12/15-12/16/05	HR3771AJ
	7.5	218	198	mg/kg	87	5.1	SW846 6010B	12/15-12/16/05	HR3771AK
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		
Cadmium									
	0.037	5.5	4.9	mg/kg	89		SW846 6010B	12/15-12/16/05	HR3771AQ
	0.037	5.5	4.7	mg/kg	85	4.7	SW846 6010B	12/15-12/16/05	HR3771AR
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		
Chromium									
	6.2	21.8	27.3	mg/kg	97		SW846 6010B	12/15-12/16/05	HR3771A2
	6.2	21.8	26.7	mg/kg	94	2.4	SW846 6010B	12/15-12/16/05	HR3771A3
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		
Lead									
	2.6	54.6	52.5	mg/kg	91		SW846 6010B	12/15-12/16/05	HR3771A5
	2.6	54.6	51.3	mg/kg	89	2.2	SW846 6010B	12/15-12/16/05	HR3771A6
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		
Mercury									
	ND	0.18	0.20	mg/kg	111		SW846 7471A	12/15/05	HR3771AF
	ND	0.18	0.20	mg/kg	108	3.5	SW846 7471A	12/15/05	HR3771AG
			Dilution Factor: 1						
			Analysis Time..: 13:25		Instrument ID..: H1		Analyst ID.....: 001086		
Selenium									
	ND	218	197	mg/kg	90		SW846 6010B	12/15-12/16/05	HR3771AX
	ND	218	188	mg/kg	86	4.5	SW846 6010B	12/15-12/16/05	HR3771A0
			Dilution Factor: 1						
			Analysis Time..: 19:39		Instrument ID..: I5		Analyst ID.....: 001637		

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver									
	ND	5.5	5.4	mg/kg	99		SW846 6010B	12/15-12/16/05	HR3771AM
	ND	5.5	5.1	mg/kg	94	5.4	SW846 6010B	12/15-12/16/05	HR3771AN

Dilution Factor: 1
Analysis Time..: 19:39 Instrument ID..: I5 Analyst ID.....: 001637

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 5L14222 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5L140222-017 **Prep Batch #...:** 5349027							
Arsenic	87	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771AU
	83	(75 - 125)	4.8	(0-20)	SW846 6010B	12/15-12/16/05	HR3771AV
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Barium	92	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771AJ
	87	(75 - 125)	5.1	(0-20)	SW846 6010B	12/15-12/16/05	HR3771AK
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Cadmium	89	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771AQ
	85	(75 - 125)	4.7	(0-20)	SW846 6010B	12/15-12/16/05	HR3771AR
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Chromium	97	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771A2
	94	(75 - 125)	2.4	(0-20)	SW846 6010B	12/15-12/16/05	HR3771A3
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Lead	91	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771A5
	89	(75 - 125)	2.2	(0-20)	SW846 6010B	12/15-12/16/05	HR3771A6
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Mercury	111	(10 - 199)			SW846 7471A	12/15/05	HR3771AF
	108	(10 - 199)	3.5	(0-50)	SW846 7471A	12/15/05	HR3771AG
		Dilution Factor: 1					
		Analysis Time..: 13:25			Instrument ID..: H1	Analyst ID.....: 001086	
Selenium	90	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771AX
	86	(75 - 125)	4.5	(0-20)	SW846 6010B	12/15-12/16/05	HR3771A0
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	
Silver	99	(75 - 125)			SW846 6010B	12/15-12/16/05	HR3771AM
	94	(75 - 125)	5.4	(0-20)	SW846 6010B	12/15-12/16/05	HR3771AN
		Dilution Factor: 1					
		Analysis Time..: 19:39			Instrument ID..: I5	Analyst ID.....: 001637	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

GENERAL CHEMISTRY DATA

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-585

General Chemistry

Lot-Sample #...: A5L140222-001 **Work Order #...:** HR36E **Matrix.....:** SO
Date Sampled...: 12/12/05 10:35 **Date Received..:** 12/14/05
% Moisture.....: 1.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**98.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-586

General Chemistry

Lot-Sample #...: A5L140222-002 **Work Order #...:** HR37E **Matrix.....:** SO
Date Sampled...: 12/12/05 10:40 **Date Received..:** 12/14/05
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**88.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-587

General Chemistry

Lot-Sample #...: A5L140222-003 **Work Order #...:** HR37F **Matrix.....:** SO
Date Sampled...: 12/12/05 10:45 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-588

General Chemistry

Lot-Sample #...: A5L140222-004 **Work Order #...:** HR37G **Matrix.....:** SO
Date Sampled...: 12/12/05 10:47 **Date Received..:** 12/14/05
% Moisture.....: 5.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-589

General Chemistry

Lot-Sample #...: A5L140222-005 **Work Order #...:** HR37J **Matrix.....:** SO
Date Sampled...: 12/12/05 10:50 **Date Received..:** 12/14/05
% Moisture.....: 4.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**95.4**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-590

General Chemistry

Lot-Sample #...: A5L140222-006 **Work Order #...:** HR37L **Matrix.....:** SO
Date Sampled...: 12/12/05 10:55 **Date Received..:** 12/14/05
% Moisture.....: 6.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-591

General Chemistry

Lot-Sample #...: A5L140222-007 **Work Order #...:** HR37N **Matrix.....:** SO
Date Sampled...: 12/12/05 11:35 **Date Received..:** 12/14/05
% Moisture.....: 4.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**96.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-592

General Chemistry

Lot-Sample #...: A5L140222-008 **Work Order #...:** HR37P **Matrix.....:** SO
Date Sampled...: 12/12/05 11:40 **Date Received..:** 12/14/05
% Moisture.....: 7.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**92.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-593

General Chemistry

Lot-Sample #...: A5L140222-009 **Work Order #...:** HR37Q **Matrix.....:** SO
Date Sampled...: 12/12/05 11:50 **Date Received..:** 12/14/05
% Moisture.....: 6.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-594

General Chemistry

Lot-Sample #...: A5L140222-010 **Work Order #...:** HR37T **Matrix.....:** SO
Date Sampled...: 12/12/05 12:20 **Date Received..:** 12/14/05
% Moisture.....: 5.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.4**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-595

General Chemistry

Lot-Sample #...: A5L140222-011 **Work Order #...:** HR37V **Matrix.....:** SO
Date Sampled...: 12/12/05 12:30 **Date Received..:** 12/14/05
% Moisture.....: 5.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-596

General Chemistry

Lot-Sample #...: A5L140222-012 **Work Order #...:** HR37W **Matrix.....:** SO
Date Sampled...: 12/12/05 12:35 **Date Received..:** 12/14/05
% Moisture.....: 4.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**95.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-597

General Chemistry

Lot-Sample #...: A5L140222-013 **Work Order #...:** HR37X **Matrix.....:** SO
Date Sampled...: 12/12/05 13:30 **Date Received..:** 12/14/05
% Moisture.....: 7.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-598

General Chemistry

Lot-Sample #...: A5L140222-014 **Work Order #...:** HR370 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:40 **Date Received..:** 12/14/05
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**87.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-599

General Chemistry

Lot-Sample #...: A5L140222-015 **Work Order #...:** HR372 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:45 **Date Received..:** 12/14/05
% Moisture.....: 6.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-600

General Chemistry

Lot-Sample #...: A5L140222-016 **Work Order #...:** HR373 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:50 **Date Received..:** 12/14/05
% Moisture.....: 8.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**91.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-601

General Chemistry

Lot-Sample #...: A5L140222-017 **Work Order #...:** HR377 **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
% Moisture.....: 8.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**91.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-602

General Chemistry

Lot-Sample #...: A5L140222-018 **Work Order #...:** HR38D **Matrix.....:** SO
Date Sampled...: 12/12/05 14:25 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-603

General Chemistry

Lot-Sample #...: A5L140222-019 **Work Order #...:** HR38F **Matrix.....:** SO
Date Sampled...: 12/12/05 14:30 **Date Received..:** 12/14/05
% Moisture.....: 6.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-604

General Chemistry

Lot-Sample #...: A5L140222-020 **Work Order #...:** HR38H **Matrix.....:** SO
Date Sampled...: 12/12/05 14:35 **Date Received..:** 12/14/05
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**89.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349069**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-605

General Chemistry

Lot-Sample #...: A5L140222-021 **Work Order #...:** HR38J **Matrix.....:** SO
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
% Moisture.....: 25

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**74.9**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**
		Dilution Factor: 1		MDL.....: 10.0		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-606

General Chemistry

Lot-Sample #...: A5L140222-022 **Work Order #...:** HR38N **Matrix.....:** SO
Date Sampled...: 12/12/05 14:45 **Date Received..:** 12/14/05
% Moisture.....: 7.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**92.2**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-607

General Chemistry

Lot-Sample #...: A5L140222-023 **Work Order #...:** HR38R **Matrix.....:** SO
Date Sampled...: 12/12/05 15:25 **Date Received..:** 12/14/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**85.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-608

General Chemistry

Lot-Sample #...: A5L140222-024 **Work Order #...:** HR38T **Matrix.....:** SO
Date Sampled...: 12/12/05 15:30 **Date Received..:** 12/14/05
% Moisture.....: 7.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**92.4**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-609

General Chemistry

Lot-Sample #...: A5L140222-025 **Work Order #...:** HR38W **Matrix.....:** SO
Date Sampled...: 12/12/05 15:35 **Date Received..:** 12/14/05
% Moisture.....: 8.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**91.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-610

General Chemistry

Lot-Sample #...: A5L140222-026 **Work Order #...:** HR380 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:40 **Date Received..:** 12/14/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**85.2**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-611

General Chemistry

Lot-Sample #...: A5L140222-027 **Work Order #...:** HR382 **Matrix.....:** SO
Date Sampled...: 12/12/05 15:45 **Date Received..:** 12/14/05
% Moisture.....: 6.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.2**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-612

General Chemistry

Lot-Sample #...: A5L140222-028 **Work Order #...:** HR384 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:45 **Date Received..:** 12/14/05
% Moisture.....: 6.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-613

General Chemistry

Lot-Sample #...: A5L140222-029 **Work Order #...:** HR387 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:50 **Date Received..:** 12/14/05
% Moisture.....: 6.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-614

General Chemistry

Lot-Sample #...: A5L140222-030 **Work Order #...:** HR389 **Matrix.....:** SO
Date Sampled...: 12/12/05 16:55 **Date Received..:** 12/14/05
% Moisture.....: 9.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**90.2**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-615

General Chemistry

Lot-Sample #...: A5L140222-031 **Work Order #...:** HR39A **Matrix.....:** SO
Date Sampled...: 12/12/05 17:00 **Date Received..:** 12/14/05
% Moisture.....: 6.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**93.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-616

General Chemistry

Lot-Sample #...: A5L140222-032 **Work Order #...:** HR39C **Matrix.....:** SO
Date Sampled...: 12/12/05 17:02 **Date Received..:** 12/14/05
% Moisture.....: 5.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**94.7**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

Conestoga-Rovers & Associates, Inc.

Client Sample ID: SO-17360-121205-DCR-617

General Chemistry

Lot-Sample #...: A5L140222-033 **Work Order #...:** HR39D **Matrix.....:** SO
Date Sampled...: 12/12/05 17:05 **Date Received..:** 12/14/05
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	**89.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**12/14-12/15/05**	**5349071**

Dilution Factor: 1 MDL.....: 10.0

METHOD BLANK REPORT

General Chemistry

Client Lot #...: 5L14222 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #: HR5RR1AA		MB Lot-Sample #:	A5L150000-069	
	ND	10.0	%	MCAWW 160.3 MOD	12/14-12/15/05	5349069
		Dilution Factor: 1				
Percent Solids		Work Order #: HR5R01AA		MB Lot-Sample #:	A5L150000-071	
	ND	10.0	%	MCAWW 160.3 MOD	12/14-12/15/05	5349071
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5L140222 **Work Order #...:** HR36E-SMP **Matrix.....:** SO
HR36E-DUP
Date Sampled...: 12/12/05 10:35 **Date Received..:** 12/14/05
% Moisture.....: 1.5

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5L140222-001		
	98.5	98.1	%	0.35	(0-20)	MCAWW 160.3 MOD	12/14-12/15/05	5349069

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5L140222 **Work Order #...:** HR377-SMP HR377-DUP **Matrix.....:** SO
Date Sampled...: 12/12/05 13:55 **Date Received..:** 12/14/05
% Moisture.....: 8.4

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5L140222-017		
	91.6	92.6	%	1.1	(0-20)	MCAWW 160.3 MOD	12/14-12/15/05	5349069

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5L140222 **Work Order #...:** HR38J-SMP **Matrix.....:** SO
HR38J-DUP
Date Sampled...: 12/12/05 14:40 **Date Received..:** 12/14/05
% Moisture.....: 25

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5L140222-021		
	74.9	73.0	%	2.5	(0-20)	MCAWW 160.3 MOD	12/14-12/15/05	5349071

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5L140222 **Work Order #...:** HR4DP-SMP **Matrix.....:** SOLID
HR4DP-DUP
Date Sampled...: 12/14/05 10:40 **Date Received..:** 12/14/05
% Moisture.....: 16

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5L140229-004		
	84.3	86.5	%	2.6	(0-20)	MCAWW 160.3 MOD	12/14-12/15/05	5349071

Dilution Factor: 1

SEVERN TRENT STL

END OF REPORT

ATTACHMENT D

DATA VALIDATION MEMORANDUM

CONESTOGA-ROVERS & ASSOCIATES

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MEMORANDUM

TO:	Gary Klepper	REF. NO.:	17360
FROM:	Kathy Shaw/dy/2/CT	DATE:	March 23, 2006
RE:	Data Quality Assessment and Validation 2005 Second Soil Investigation General Motors Grand Rapids MFD Site - Grand Rapids, Michigan	SSOW:	17307-030002

The following details a quality assessment and validation of the analytical data resulting from the December 12, 2005, collection of 31 soil and two (2) quality control samples from the General Motors Grand Rapids MFD Site in Grand Rapids, Michigan. The sample summary detailing sample identification, sample location, quality control samples, and analytical parameters is presented in Table 1. Sample analysis was completed at Severn Trent Laboratories in North Canton, Ohio (STL) in accordance with the methodologies presented in Table 2.

The quality control criteria used to assess the data were established by the methods and the quality assurance project plan (QAPP). Application of quality assurance criteria was consistent with following guidance documents:

i. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999;

ii. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Review", EPA-540/R-94/013, February 1994.

These guidelines are collectively referred to as "NFGs" in this Memorandum.

The following elements are addressed in this memorandum with qualification if necessary in the identified tables:

	Data Review Element	Qualification Table
1	Sample Quantitation	NA
2	Sample Preservation and Holding Times	NA
3	Method Blank Samples	NA
4	Surrogate Compounds – Organic Analyses	Table 3
5	Matrix Spike/Matrix Spike Duplicate Analyses	NA
6	Laboratory Control Sample Analysis/Laboratory Control Duplicate	NA
7	Field Quality Assurance/Quality Control	NA

Sample Quantitation

The laboratory reported detected concentrations of polynuclear aromatics (PNA) and metals below the laboratory's report limit (RL) but above the laboratory's method detection limit (MDL). The laboratory flagged these sample concentrations with a "J" or a "B" for PNA and metals respectively. These concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum. The laboratory "B" flags may be disregarded.

The PNA sample analysis resulted in a number of concentrations reported in excess of the calibration range, which were flagged by the laboratory with an "E". These concentrations should be qualified as estimated (J) concentrations and should not be reported. The analytes with concentrations in excess of the calibration range were reanalyzed at appropriate dilutions; these values should be reported.

Sample Preservation and Holding Times

Sample holding time periods and preservation requirements are presented in Table 2. Samples were prepared and/or analyzed within the specified holding time periods. The samples were shipped and maintained in accordance with the sample preservation requirements.

Method Blank Samples

Method blank samples are prepared from a purified sample matrix and are processed concurrently with investigative samples to assess the presence and the magnitude of sample contamination introduced during sample analysis. Method blank samples are analyzed at a minimum frequency of one per analytical batch and target analytes should be non-detect.

The Method blank samples were reported to be free from detectable levels of target analytes, indicating no additional laboratory-attributable contamination occurred.

Surrogate Compounds – Organic Analyses

Individual sample performance for organic analyses was monitored by assessing the results of surrogate compound percent recoveries. Surrogate percent recoveries are reviewed against the laboratory developed control limits provided in the analytical report.

The surrogate recovery acceptance criteria were met for all samples that could be evaluated with the exception of samples presented with qualifiers in Table 3.

Matrix Spike/Matrix Spike Duplicate Analyses

To assess the long term accuracy and precision of the analytical methods on various matrices, matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and the relative percent difference (RPD) of the concentrations were determined. The organic MS/MSD percent recovery and RPD control limits are established by the laboratory. The inorganic control limits are defined by the methods and the NFG, which require recoveries between 75 to 125 percent with RPDs less than 35 percent for soil samples. The sample selected for MS/MSD analysis is identified in Table 1. The MS/MSD percent recoveries and associated RPD acceptance criteria were met.

Laboratory Control Sample/Laboratory Control Duplicate Analysis

The laboratory control sample and laboratory control duplicate (LCS/LCD) analyses serve as a monitor of the overall performance in all steps of the sample analysis and are analyzed with each sample batch. The LCS/LCD percent recoveries were evaluated against method and laboratory established control limits. The LCS/LCD percent recoveries were within the laboratory control limits or did not warrant qualification, indicating that an acceptable level of overall performance was achieved.

Laboratory precision was verified by the relative percent difference (RPD) of the LCS/LCD when a matrix spike/matrix spike duplicate was not analyzed. The RPDs were within the laboratory control limits, indicating that an acceptable level of overall laboratory precision was achieved.

Field Quality Assurance/Quality Control

The field quality assurance/quality control consisted of two (2) field duplicate sample sets. Overall precision for the sampling event and laboratory procedures was monitored using the results of the field duplicate sample sets. The RPDs associated with these duplicate samples must be less than 100 percent for soil samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the RL, the evaluation criteria is two times the RL value for soil samples. Table 4 presents the RPDs of detected analytes in duplicate sample sets. The data indicate that an adequate level of precision was achieved for the sampling event.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and precision based on the provided information and may be used with the qualifications noted.

TABLE 1
SAMPLE COLLECTION AND ANALYSIS SUMMARY
2005 SECOND SOIL INVESTIGATION
GENERAL MOTORS GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

						Parameters	
Sample Identification	*Sample Location*	*Sample Depth Start - (ft-bgs) - End*		*Matrix*	*QC Sample*	*PNA*	*RCRA Metals*
SO-17360-121205-DCR-585	SB25-05	0	2	Soil		X	X
SO-17360-121205-DCR-586	SB25-05	2	4	Soil		X	X
SO-17360-121205-DCR-587	SB25-05	4	6	Soil		X	X
SO-17360-121205-DCR-588	SB25-05	6	8	Soil		X	X
SO-17360-121205-DCR-589	SB25-05	6	8	Soil	Duplicate (588)	X	X
SO-17360-121205-DCR-590	SB25-05	8	10	Soil		X	X
SO-17360-121205-DCR-591	SB24-05	0	2	Soil		X	X
SO-17360-121205-DCR-592	SB24-05	4	6	Soil		X	X
SO-17360-121205-DCR-593	SB24-05	8	10	Soil		X	X
SO-17360-121205-DCR-594	SB23-05	0	2	Soil		X	X
SO-17360-121205-DCR-595	SB23-05	4	6	Soil		X	X
SO-17360-121205-DCR-596	SB23-05	8	10	Soil		X	X
SO-17360-121205-DCR-597	SB22-05	0	2	Soil		X	X
SO-17360-121205-DCR-598	SB22-05	2	4	Soil		X	X
SO-17360-121205-DCR-599	SB22-05	4	6	Soil		X	X
SO-17360-121205-DCR-600	SB22-05	6	8	Soil		X	X
SO-17360-121205-DCR-601	SB22-05	8	10	Soil	MS/MSD	X	X
SO-17360-121205-DCR-602	SB21-05	0	2	Soil		X	X
SO-17360-121205-DCR-603	SB21-05	2	4	Soil		X	X
SO-17360-121205-DCR-604	SB21-05	4	6	Soil		X	X
SO-17360-121205-DCR-605	SB21-05	6	8	Soil		X	X
SO-17360-121205-DCR-606	SB21-05	8	10	Soil		X	X
SO-17360-121205-DCR-607	SB20-05	0	2	Soil		X	X
SO-17360-121205-DCR-608	SB20-05	2	4	Soil		X	X
SO-17360-121205-DCR-609	SB20-05	4	6	Soil		X	X
SO-17360-121205-DCR-610	SB20-05	6	8	Soil		X	X
SO-17360-121205-DCR-611	SB20-05	8	10	Soil		X	X
SO-17360-121205-DCR-612	SB19-05	0	2	Soil		X	X
SO-17360-121205-DCR-613	SB19-05	0	2	Soil	Duplicate (612)	X	X
SO-17360-121205-DCR-614	SB19-05	2	4	Soil		X	X
SO-17360-121205-DCR-615	SB19-05	4	6	Soil		X	X
SO-17360-121205-DCR-616	SB19-05	6	8	Soil		X	X
SO-17360-121205-DCR-617	SB19-05	8	10	Soil		X	X

Notes:

PNA- Polynuclear Aromactics
RCRA - Resource Conservation Recovery Act
QC - Quality Control
MS/MSD - Matrix Spike/ Matrix Splice Duplicate

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
2005 SECOND SOIL INVESTIGATION
GENERATL MOTORES GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

Parameter	*Method*	*Matrix*	*Holding Time*	*Preservation*
PNA	SW-846 8270C	Soil	- 14 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
RCRA Metals		Soil	- 180 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
Arsenic	SW-846 6010B			
Barium	SW-846 6010B			
Cadmium	SW-846 6010B			
Chromium Total	SW-846 6010B			
Lead	SW-846 6010B			
Selenium	SW-846 6010B			
Silver	SW-846 6010B			
Mercury	SW-846 7471A	Soil	- 28 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", 3rd Edition, and Promulgated updates, November 1986

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VIOLATION OF SURROGATE RECOVERY ACCEPTANCE CRITERIA
2005 SECOND SOIL INVESTIGATION
GENERAL MOTORS GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

Parameter	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Sample ID*	*Analytes*	*Sample Results*	*Units*	*Qualifier*
PNA	2,4,6-Tribromophenol	32	33-116	SO-17360-121205-DCR-602	2-Methylnaphthalene	130	µg/kg	J
					Acenaphthene	180	µg/kg	J
					Acenaphthylene	26	µg/kg	J
					Anthracene	570	µg/kg	J
					Benzo(g,h,i)perylene	1300	µg/kg	J
					Benzo(k)fluoranthene	820	µg/kg	J
					Dibenz(a,h)anthracene	430	µg/kg	J
					Fluorene	260	µg/kg	J
					Indeno(1,2,3-cd)pyrene	1100	µg/kg	J
					Naphthalene	92	µg/kg	J
PNA	2,4,6-Tribromophenol	31	33-116	SO-17360-121205-DCR-602	Benzo(a)anthracene	2100	µg/kg	J
					Benzo(a)pyrene	2000	µg/kg	J
					Benzo(b)fluoranthene	3000	µg/kg	J
					Chrysene	2600	µg/kg	J
					Fluoranthene	3100	µg/kg	J
					Phenanthrene	2200	µg/kg	J
					Pyrene	2600	µg/kg	J
PNA	2,4,6-Tribromophenol	33	33-116	SO-17360-121205-DCR-612	2-Methylnaphthalene	11	µg/kg	J
					Acenaphthene	280 U	µg/kg	UJ
					Acenaphthylene	280 U	µg/kg	UJ
					Anthracene	23	µg/kg	J
					Benzo(a)anthracene	160	µg/kg	J
					Benzo(a)pyrene	180	µg/kg	J
					Benzo(b)fluoranthene	230	µg/kg	J
					Benzo(g,h,i)perylene	140	µg/kg	J
					Benzo(k)fluoranthene	70	µg/kg	J
					Chrysene	170	µg/kg	J
					Dibenz(a,h)anthracene	37	µg/kg	J
					Fluoranthene	250	µg/kg	J
					Fluorene	280 U	µg/kg	UJ
					Indeno(1,2,3-cd)pyrene	120	µg/kg	J
					Naphthalene	7.5	µg/kg	J
					Phenanthrene	98	µg/kg	J

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VIOLATION OF SURROGATE RECOVERY ACCEPTANCE CRITERIA
2005 SECOND SOIL INVESTIGATION
GENERAL MOTORS GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

Parameter	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Sample ID*	*Analytes*	*Sample Results*	*Units*	*Qualifier*
PNA	Nitrobenzene-d5	40	42-110	SO-17360-121205-DCR-615	Pyrene	210	µg/kg	J
					2-Methylnaphthalene	280 U	µg/kg	UJ
					Acenaphthene	280 U	µg/kg	UJ
					Acenaphthylene	280 U	µg/kg	UJ
					Anthracene	280 U	µg/kg	UJ
					Benzo(a)anthracene	280 U	µg/kg	UJ
					Benzo(a)pyrene	280 U	µg/kg	UJ
					Benzo(b)fluoranthene	280 U	µg/kg	UJ
					Benzo(g,h,i)perylene	280 U	µg/kg	UJ
					Benzo(k)fluoranthene	280 U	µg/kg	UJ
					Chrysene	280 U	µg/kg	UJ
					Dibenz(a,h)anthracene	280 U	µg/kg	UJ
					Fluoranthene	9.0 J	µg/kg	J
					Fluorene	280 U	µg/kg	UJ
					Indeno(1,2,3-cd)pyrene	280 U	µg/kg	UJ
					Naphthalene	280 U	µg/kg	UJ
					Phenanthrene	280 U	µg/kg	UJ
					Pyrene	280 U	µg/kg	UJ

Notes:

J - Estimated Concentration
UJ - Estimated Report Limit
U - Not present at or above the associated value

TABLE 4

SUMMARY OF DETECTED ANALYTES IN FIELD DUPLICATE SAMPLE SETS
2005 SECOND SOIL INVESTIGATION
GENERAL MOTORS GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

Parameter	*Analyte*	*Original Sample ID*	*Original Result*	*Duplicate Sample ID*	*Duplicate Result*	*RPD*	*Units*
		SO-17360-121205-DCR-588		SO-17360-121205-DCR-589			
PNA	Anthracene		280 U		7.6 J	NC	µg/kg
	Benzo(a)anthracene		21 J		32 J	42	µg/kg
	Benzo(a)pyrene		15 J		26 J	54	µg/kg
	Benzo(b)fluoranthene		26 J		38 J	38	µg/kg
	Benzo(g,h,i)perylene		11 J		17 J	43	µg/kg
	Benzo(k)fluoranthene		9.2 J		18 J	65	µg/kg
	Chrysene		24 J		33 J	32	µg/kg
	Fluoranthene		46 J		68 J	39	µg/kg
	Indeno(1,2,3-cd)pyrene		9.5 J		16 J	51	µg/kg
	Phenanthrene		33 J		44 J	29	µg/kg
	Pyrene		34 J		47 J	32	µg/kg
RCRA Metals	Arsenic		1.6		1.2	29	µg/kg
	Barium		6.4		4.3	39	µg/kg
	Cadmium		0.057 J		0.084 U	NC	µg/kg
	Chromium Total		12.0		11.1	7.8	µg/kg
	Lead		10.3		4.6	77	µg/kg
	Mercury		0.042 U		0.017 J	NC	µg/kg
		SO-17360-121205-DCR-612		SO-17360-121205-DCR-613			
PNA	2-Methylnaphthalene		11 J		13 J	17	µg/kg
	Anthracene		23 J		23 J	0	µg/kg
	Benzo(a)anthracene		160 J		130 J	21	µg/kg
	Benzo(a)pyrene		180 J		130 J	32	µg/kg
	Benzo(b)fluoranthene		230 J		200 J	14	µg/kg
	Benzo(g,h,i)perylene		140 J		95 J	38	µg/kg
	Benzo(k)fluoranthene		70 J		71 J	1.4	µg/kg
	Chrysene		170 J		130 J	27	µg/kg
	Dibenz(a,h)anthracene		37 J		261 J	35	µg/kg
	Fluoranthene		250 J		210 J	17	µg/kg
	Fluorene		280 U		7.3 J	NC	µg/kg
	Indeno(1,2,3-cd)pyrene		120 J		84 J	35	µg/kg
	Naphthalene		7.5 J		11 J	38	µg/kg
	Phenanthrene		98 J		90 J	8.5	µg/kg
	Pyrene		210 J		180 J	15	µg/kg

TABLE 4

SUMMARY OF DETECTED ANALYTES IN FIELD DUPLICATE SAMPLE SETS
2005 SECOND SOIL INVESTIGATION
GENERAL MOTORS GRAND RAPIDS MFD SITE
GRAND RAPIDS, MICHIGAN

Parameter	*Analyte*	*Original Sample ID*	*Original Result*	*Duplicate Sample ID*	*Duplicate Result*	*RPD*	*Units*
		SO-17360-121205-DCR-612		SO-17360-121205-DCR-613			
RCRA Metals	Arsenic		2.3		2.2	4.4	µg/kg
	Barium		17.8		13.7	26	µg/kg
	Cadmium		0.21		0.16	27	µg/kg
	Chromium Total		26.0		12.1	73	µg/kg
	Lead		8.6		6.8	23	µg/kg
	Mercury		0.016 J		0.022 J	32	µg/kg

Notes:

RPD Relative Percent Difference
NC - Not calculable
J - Estimated Concentration
U - Not present at or above the associated value