APPENDIX 3

Kontzamanis Graumann Smith MacMillan Inc.

KGS GROUP CONSULTING ENGINEERS

3rd Floor
865 Waverley Street
Winnipeg,
Manitoba
R3T 5P4
204.896.1209
fax: 204.896.0754
www.kgsgroup.com

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File No. 12-0107-004

City of Winnipeg
Municipal Accommodations
3rd Floor – 65 Garry Street
Winnipeg, Manitoba
R3C 4K4

ATTENTION: Ms. Margot Colquhoun
Building Project Architect

RE: Soil Quality Assessment
Former Elmwood/Nairn Landfill Site at 960 Thomas Avenue and
3 Soil Off-Site Disposal Areas at
Redonda, Pipeline and Wenzel Road
Winnipeg, Manitoba

Dear Ms Colquhoun:

1.0 INTRODUCTION

KGS Group was contracted to conduct a soil quality assessment at the above referenced 4 properties. A test pitting program was completed on March 26th and March 27th, 2012 on the Former Elmwood/Nairn landfill and surficial grab soil samples were collected at each of the other 3 sites on March 26th and 28th, 2012. The purpose of the investigation was to investigate and characterize the approximate 120,000 m^3 of soil on the Former Elmwood/Nairn landfill property prior to its removal to off-site locations in Winnipeg, Manitoba, and to determine the presence and/or absence of soil impacts. Soil sampling for the 3 off-site disposal sites were also conducted to characterize the approximate 30,000 m^3 of soil that had been previously removed to these sites.

Select soil samples from the test pits (Former landfill) and surficial grab samples (3 off-site locations) were submitted to ALS Laboratory Group of Winnipeg, Manitoba for analysis of BTEX (benzene, toluene, ethylbenzene and xylenes) and Petroleum Hydrocarbon fractions (PHCs) F1 to F4, polycyclic aromatic hydrocarbons (PAHs) and heavy metals. All samples were field screened for potential hydrocarbon vapours.

Figure 1 shows the site locations of the Former Elmwood/Nairn landfill and the 3 off-site soil disposal sites. Figures 2 to 4 illustrate the locations of the test pits at the Former Elmwood/Nairn landfill site, and the locations of the surficial grab samples at the three off-site locations.

2.0 BACKGROUND

In 2008, KGS Group conducted an intrusive field program that included 77 test pits at the Former Elmwood/Nairn landfill at 960 Thomas Avenue. The findings of the 2008 investigation demonstrated that the site was impacted mainly from significant volumes of clay, soil, asphalt and concrete waste with minor volumes of municipal waste.

Based on the 2008 KGS Group study, the general geologic profile for the site is 1 m of soil cover, followed by 2 to 3 m of asphalt, concrete and soil, underlain by reeds and bullrushes with approximately 0.3 m of bog/peat deposit overlying brown, undisturbed silty clay.

3.0 LABORATORY ASSESSMENT GUIDELINES

ALS Laboratory Group is a Canadian Association for Laboratory Accreditation (CALA) accredited and certified laboratory. Results from the 2012 laboratory analysis for soils were assessed using the applicable Canadian Council of Ministers of the Environment (CCME) Canada-Wide Standard for Petroleum Hydrocarbons in soil (CWS) and CCME Canadian Environmental Quality Guidelines (CEQG)

4.0 FIELD INVESTIGATION/SAMPLING PROTOCOL

In total, twenty-six (26) testpits were conducted at the Former Elmwood/Nairn landfill site during the 2012 field program. The test pitting program was supervised by Mr. Andrew Sinclair, Environmental Technologist, of KGS Group and the excavator was supplied by J&D Penner. Soil samples were collected at 30 cm intervals and field screened for hydrocarbon vapours using a MiniRae Plus Photo Ionization Detector (PID). The soil samples exhibiting the highest field screen vapour results were selected for submission to ALS Laboratory Group in Winnipeg, Manitoba.

A total of twenty-eight (28) soils samples were submitted for laboratory analysis of metals, including two (2) field duplicates. Of the twenty-eight (28) samples, a selected six (6) samples were also submitted to the laboratory for analysis of BTEX, PHC fractions F1 to F4 and PAHs.

Test pit logs from the 2012 field program are included as Table 1. The test pit logs detail the soil profiles as well as the field vapour screening results at the Former Elmwood/Nairn landfill site. GPS coordinates are also included for each test pit and soil sampling location from the 2012 field program. The vapour screening results for the 3 off-site areas are shown in Table 2.

5.0 ASSESMENT OF FIELD LABORATORY ANALYTICAL RESULTS

5.1 FIELD RESULTS – VAPOUR LEVELS

The results of the field vapour screening program identified no elevated vapour levels with the highest monitored level of 38.2 ppm at TP21-S7 obtained from Testpit 21. Based on the 2012 field vapour screening results shown in Table 1, there are no concerns related to soil vapours at the Former Elmwood/Nairn landfill site, indicating that there should no vapour concerns for construction at both the former landfill site or at the three off-site disposal areas (Table 2).

5.2 METAL ANALYSIS RESULTS

The laboratory results for metals identified that two test pits with soil samples that were above CCME Residential/Parkland criteria. Sample TP5-S3 obtained from Test pit 5 exceeded residential criteria for arsenic, lead, tin and zinc, and sample TP18-S2 obtained from Test pit 18 exceeded criteria for lead and zinc. Soil sample TP5-S3 had an arsenic result of 14.6 mg/kg compared to the criteria of 12 mg/kg; a lead result of 602 mg/kg compared to the criteria of 140 mg/kg; a tin result of 633 mg/kg, compared to the criteria of 50 mg/kg, and a zinc result of 833 mg/kg compared to the criteria of 200 mg/kg soil sample. Soil sample TP18-S2 had a lead result of 141 mg/kg compared to the criteria of 140 mg/kg, and a zinc result of 388 mg/kg compared to the criteria of 200 mg/kg.

The laboratory results received for the 3 off site disposal locations identified that the Redonda Street and Wenzel Road locations each had one soil sample exceed the CCME Residential/Parkland criteria. Redonda Street composite sample 1 had a lead result of 269 mg/kg compared to the criteria of 140 mg/kg. Wenzel Street had a selenium result of 1.35 mg/kg compared to the criteria of 1 mg/kg. Both of the metal exceedances for Residential/Parkland criteria were below Industrial Land Use Criteria. The results from the six (6) soil samples obtained from the Pipeline Road disposal site revealed that there were no exceedances for CCME Residential/Parkland criteria.

5.3 BTEX AND PHC FRACTIONS F1 TO F4 RESULTS

The laboratory results for both BTEX and PHC fractions F1 to F4 from all six (6) screened test pit identified that there were no exceedances of CCME Residential/Parkland Criteria.

The laboratory results for the 3 off-site disposal locations identified that the Redonda Street and Wenzel Road locations each had one exceedance of CCME Residential/Parkland criteria. Redonda Street had a PHC F3 result of 311 mg/kg compared to the criteria of 300 mg/kg. Wenzel Road had a PHC F3 result of 1,770 mg/kg compared to the criteria of 300 mg/kg. The Wenzel Road exceedance of PHC F3 at 1,770 mg/kg is marginally over the Commercial and Industrial Land Use Criteria value of 1,700 mg/kg. The results received from the six (6) soil samples obtained at the Pipeline Road disposal site revealed that there were no exceedances for CCME Residential/Parkland criteria.

5.4 POLYCYCLIC AROMATIC HYDROCARBON (PAHs) RESULTS

The laboratory results for polycyclic aromatic hydrocarbons (PAHs) identified no exceedances of CCME Residential/Parkland criteria in all of the six (6) test pits tested.

The laboratory results for polycyclic aromatic hydrocarbons received from the 3 off-site disposal locations revealed that there were no PAH parameters in exceedance of the CCME Residential/Parkland use criteria.

6.0 SUMMARY AND CONCLUSIONS

6.1 FORMER ELMWOOD/NAIRN LANDFILL SITE

- The results of the March 2012 soil vapour screening and soil sampling program at the Former Elmwood/Nairn landfill site has demonstrated that 2 test pits out of a total of 26 have metal concentrations that exceed the CCME Residential/Parkland criteria for metals. The data for these same 26 test pit sample sites demonstrated no significant field vapour screening levels, and all six (6) screened samples for BTEX/PHC fractions F1 to F4, and PAH's were below the CCME Residential/Parkland criteria.

- The presence of metal concentrations above criteria in 2 of 26 test pits is indicative of low levels of potential risk for both on-site and off-site development activities. Exceedances of metal criteria in native soils in the Winnipeg area are not uncommon and relates to the variability of the local geologic environment.

- There is potential that the 3 off-site disposal areas have received fill materials from a number of various sources as is often the case. The Wenzel disposal area has definitely received fill materials from other sources other than to the Former Elmwood/Nairn landfill site. Co-mingling of soil wastes at these sites makes source delineation very difficult to accurately assess.

- The Redonda disposal area has received significant amounts of concrete and asphalt blocks as presented in the Redonda photos. This large, boulder size material may present longer term development concerns. The asphalt block contain significant levels of PAH's that have presented environmental concerns at other similar disposal sites.

- Fill materials that have no practical on-site construction at the former landfill site may be considered for the development of landscaped visual/noise barriers with the rail track area being a possible area for consideration.

6.2 OFF-SITE DISPOSAL LOCATIONS

- The results of the March 2012 soil sampling program from the three (3) off site soil disposal locations demonstrated that 2 surficial soil samples out of a total of 18 have metal concentrations that exceed the CCME Residential/Parkland criteria for metals but do not exceed the Commercial Land Use Criteria. The results for BTEX/PHC fractions F1 to F4 revealed that 2 of the 6 soil samples exceeded F3 CCME Residential/Parkland criteria. The results for Polycyclic Aromatic Hydrocarbons on all six (6) samples revealed that there are no exceedances in the CCME Residential/Parkland Criteria.

- The presence of PHC fraction F3 concentrations above criteria is indicative of low levels of potential risk. The field vapour screening indicated low levels of hydrocarbons at all three of the off-site soil disposal locations. This exceedance could potentially come from heavy equipment grading the off-site soil disposal site and presents a very low risk for vapours into structures or construction trucks.

- The presence of metal concentrations above criteria in 2 of 18 surficial soil samples is indicative of low levels of potential risk for development on the 3 disposal sites. Exceedances of metal criteria in native soils in the Winnipeg area are not uncommon and relates to the variability of geologic environment.

- The soil vapour screening on the 3 off-site soil disposal areas indicate very low levels such that hydrocarbon soil vapours should not be an environmental concern for development.

7.0 CLOSURE

We trust the above Final Report is adequate for your current requirement.

Prepared By:

For Andrew Sinclair
Technologist

Approved By:

Robert Sinclair, P,Eng.
Manager, Environmental Services

RDS/jr

TABLES

TABLE 1
METALS IN SOIL
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Sample No.	Date	Parameter (mg/kg)																	
		Aluminum	Antimony[3]	Arsenic	Barium[3]	Beryllium[3]	Bismuth	Boron (Hot Water Extract)	Boron	Cadmium	Calcium	Chloride	Chromium (Total)	Cobalt[3]	Copper	Iron	Lead	Magnesium	Manganese
EQL		*5*	*0.1*	*0.1*	*0.5*	*0.1*	*0.02*		*10*	*0.02*	*100*	*0.02*	*1*	*0.02*	*1*	*25*	*0.2*	*10*	*0.5*
Former Elmwoood/Nair Landfill																			
TP1-S1	26-Mar-12	12900	0.49	4.19	131	0.56	0.14	1.59	13	0.31	74400	0.94	27.2	7.62	25	17100	51.8	28900	358
TP2-S2	26-Mar-12	5050	0.38	2.16	48	0.20	0.05	1.09	<10	0.22	91800	0.44	17	3.18	19.8	8900	39.9	34100	195
TP3 S2	27-Mar-12	12300	0.74	4.06	218	0.46	0.12	0.98	24	0.19	96000	0.83	24.9	6.52	25.1	18200	60.5	41900	342
TP4 S1	27-Mar-12	16700	0.24	5.4	104	0.64	0.15	0.76	18	0.13	77400	1.37	33	9.32	22.3	21500	7.95	46100	404
TP5 S3	27-Mar-12	15700	5.49	**14.6**	241	0.59	0.40	2.31	18	<0.020	61200	1.00	36.7	10.9	62.2	58900	**602**	24800	550
TP6 S3	27-Mar-12	18200	1.26	5.92	192	0.74	0.19	4.53	23	0.37	53100	0.99	34.2	10.7	35.1	24500	86	24700	677
TP101 S1 Field Dup of TP6 S3	27-Mar-12	17500	0.35	5.32	176	0.85	0.19	4.44	19	0.30	50300	1.05	33.2	11.9	26.4	23800	27.8	23000	893
TP7 S2	27-Mar-12	20200	0.5	5.79	180	0.84	0.20	1.38	16	0.22	58200	1.35	41.9	11.8	31.3	26200	30.6	28900	601
TP8 S3	27-Mar-12	13500	0.99	5.36	312	0.62	0.18	2.39	23	0.34	71700	0.86	26.6	8.31	31.9	20800	93.1	28200	679
TP9 S3	27-Mar-12	16800	1.07	4.72	186	0.68	0.18	1.57	15	0.23	59900	1.24	35.2	10.7	27.6	22600	57.6	28200	440
TP10 S1	27-Mar-12	9570	0.28	3.26	84	0.41	0.09	0.73	12	0.16	97700	0.79	21.6	5.93	16.1	15100	16.8	46600	462
TP11 S1	27-Mar-12	15900	0.39	4.15	137	0.59	0.15	1.57	20	0.27	83300	0.95	31.1	7.97	23.3	19700	75.4	36600	363
TP12 S3	27-Mar-12	23700	0.33	6.11	173	0.86	0.25	1.54	20	0.27	44000	1.58	44.4	12.9	29.9	27600	16.8	23200	592
TP13 S3	27-Mar-12	15300	0.25	5.55	142	0.57	0.13	4.18	20	0.19	76600	1.15	30.7	9.08	23.1	20700	15.2	38000	403
TP14 S2	27-Mar-12	19300	0.56	5.4	192	0.72	0.19	1.83	18	0.22	66600	1.24	35.9	12.1	27.9	24300	40.4	26800	464
TP15 S2	27-Mar-12	17800	0.34	5.56	155	0.82	0.19	1.69	17	0.22	63900	1.33	34.5	11.3	25.3	24100	20.8	29300	492
TP16 S3	27-Mar-12	14200	0.78	5.52	198	0.56	0.20	7.91	27	1.00	66500	0.97	30.1	8.21	33.2	27400	127	27600	375
TP17 S1	27-Mar-12	19200	0.93	5.84	205	0.83	0.18	4.35	20	0.60	49700	1.13	37.4	11.1	37.4	24500	101	24400	377
TP18 S2	27-Mar-12	21600	1.65	8.22	334	0.98	0.22	7.19	33	0.64	56700	1.21	39.5	12.5	41	35400	141	24400	476
TP19 S2	27-Mar-12	21600	0.71	7.51	180	0.87	0.20	6.90	33	0.36	66100	1.34	38.6	12.1	40.2	26700	53.1	31400	516
TP20 S1	27-Mar-12	19700	0.28	5.21	143	0.69	0.16	1.03	14	0.20	66100	1.24	36.9	10.4	24.9	24300	15.5	27400	421
TP21 S3	27-Mar-12	13800	0.24	3.83	113	0.46	0.13	0.90	14	0.17	82600	1.10	28.3	8.38	18.8	18200	10.3	44100	434
TP22 S3	27-Mar-12	21300	0.33	6.22	200	0.90	0.20	1.19	16	0.25	43600	1.44	41.2	13.4	28.6	28400	14.7	23200	559
TP23 S3	27-Mar-12	15500	0.35	4.87	126	0.60	0.14	1.06	14	0.31	73000	1.10	30.8	9.3	25.2	20500	27.3	32500	378
TP102 S2 Field Dup of TP23 S3	27-Mar-12	16400	0.44	4.73	133	0.68	0.15	1.23	14	0.27	68500	1.02	31.7	9.34	26	21400	37.4	32000	377
TP24 S1	27-Mar-12	26300	0.36	5.58	220	0.99	0.17	2.92	23	0.18	58700	1.45	44.2	11.6	28.5	27100	27.5	26600	489
TP25 S3	27-Mar-12	17700	0.36	4.93	139	0.69	0.15	1.45	16	0.21	63600	1.33	36.4	10.6	27.4	23800	16.4	33800	429
TP26 S3	27-Mar-12	11800	0.3	3.7	114	0.54	0.11	1.29	15	0.20	81800	0.89	23.4	6.94	29.9	16800	24.6	42500	375
Pipeline Road																			
PL COMP S1	28-Mar-12	6570	0.57	2.72	72	0.40	0.07	-	12	0.22	88300	0.57	18.4	4.02	22.8	11100	31.4	32100	216
PL COMP S2	28-Mar-12	13700	0.46	4.21	109	0.55	0.13	-	13	0.21	64100	1.03	26.5	7.26	20.5	17600	23.4	26800	309
PL COMP S3	28-Mar-12	22500	0.32	5.59	139	0.98	0.17	-	17	0.30	34800	1.18	34.9	9.97	25.5	23000	21.5	18500	367
PL COMP S4	28-Mar-12	23300	0.42	5.47	197	0.91	0.21	-	18	0.22	42300	1.80	44.2	11.9	30.6	27500	26.7	24300	522
PL COMP S5	28-Mar-12	16300	0.45	5.82	153	0.66	0.15	-	18	0.25	69200	1.12	30.1	7.97	24.2	20200	36.2	28600	369
PL COMP S6	28-Mar-12	2880	0.34	1.42	37	0.15	0.03	-	<10	0.17	89300	0.30	13.6	2.09	15.4	7140	20.5	27800	154
Wenzel Road																			
WENZEL COMP S1	28-Mar-12	23400	0.36	7.44	159	1.21	0.23	-	13	0.32	30000	1.46	40.5	14.9	29.1	29900	11.7	15900	692
WENZEL COMP S2	28-Mar-12	20000	0.34	8.79	157	1.08	0.22	-	11	0.30	31100	1.43	36.5	12	28.5	29100	10.8	14700	375
WENZEL COMP S3	28-Mar-12	22600	0.28	6.02	146	0.94	0.20	-	14	0.23	49100	1.47	37.8	10	24.1	23700	11.3	23300	461
WENZEL COMP S4	28-Mar-12	14700	0.17	4.71	105	0.74	0.13	-	<10	0.11	60900	0.92	26.4	8.3	18.2	18200	9.98	25100	367
WENZEL COMP S5	28-Mar-12	23100	0.37	8.26	175	1.29	0.26	-	11	0.30	16400	1.58	45.3	13.7	34.1	32500	12.4	12200	503
WENZEL COMP S6	28-Mar-12	17000	0.27	5.66	137	0.84	0.16	-	14	0.20	51900	1.11	30.7	8.9	21.8	20600	16.1	24200	401
Redonda Road																			
REDONDA COMPOSITE S1	26-Mar-12	7490	0.63	2.73	96.9	0.34	0.10	1.40	13	0.24	94500	0.76	19.7	4.74	28.3	12100	46.4	34500	256
REDONDA COMPOSITE S2	26-Mar-12	9020	0.54	2.99	96.8	0.36	0.09	1.98	13	0.22	101000	0.69	23.3	5.29	28.9	13200	43.2	36700	296
REDONDA COMPOSITE S3	26-Mar-12	15100	0.62	4.6	208	0.70	0.14	3.16	22	0.26	75900	0.96	28.1	8.65	37.3	18700	76.3	30300	401
REDONDA COMPOSITE S4	26-Mar-12	11100	1.68	9.77	133	0.43	0.11	1.81	15	0.22	88500	0.73	22.6	7.29	26.6	17900	75.9	34800	316
REDONDA COMPOSITE S5	26-Mar-12	8790	0.68	2.99	101	0.34	0.10	1.34	13	0.22	90400	0.65	21.7	5.36	30.4	12300	49.4	34700	264
REDONDA COMPOSITE S6	26-Mar-12	18300	0.61	5.47	172	0.66	0.17	2.02	18	0.24	63600	1.24	36	9.66	26.4	21900	61.7	27600	400
REDONDA COMPOSITE S6/JAR	26-Mar-12	16100	0.79	5.07	184	0.66	0.15	-	16	0.24	66100	1.05	30	8.63	26.6	18900	59	28700	389
REDONDA COMPOSITE S1/JAR	26-Mar-12	9010	1.6	3.22	101	0.30	0.11	-	14	0.23	102000	0.73	23.4	5.16	28.9	13100	**269**	36500	281
CCME - Canadian Soil Quality Guidelines[1] - Residential / Parkland Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		-	20	12	500	4	-	-	-	10	-	-	64	50	63	-	140	-	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[4]		-	-	12	NC	-	-	-	-	14	-	-	220	-	1100	-	140	-	-
Environmental Health Guidelines																			
Soil Contact Guideline		-	-	17	NC	-	-	-	-	10	-	-	64	-	63	-	300	-	-
Nutrient and Energy Cycling Check		-	-	NC	NC	-	-	-	-	54	-	-	52	-	350	-	723	-	-
CCME - Canadian Soil Quality Guidelines[1] - Commercial Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		-	40	12	2,000	8	-	-	-	22	-	-	87	300	91	-	260	-	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[5]		-	-	12	NC	-	-	-	-	49	-	-	630	-	4000	-	260	-	-
Environmental Health Guidelines																			
Soil Contact Guideline		-	-	26	NC	-	-	-	-	22	-	-	87	-	91	-	600	-	-
Nutrient and Energy Cycling Check		-	-	NC	NC	-	-	-	-	195	-	-	NC	-	350	-	834	-	-
CCME - Canadian Soil Quality Guidelines[1] - Industrial Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		-	40	12	2,000	8	-	-	-	22	-	-	87	300	91	-	600	-	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[5]		-	-	12	NC	-	-	-	-	2090	-	-	6,700	-	20000	-	8,200	-	-
Off-site Migration Check		-	-	39	NC	-	-	-	-	192	-	-	2,300	-	16000	-	740	-	-
Environmental Health Guidelines																			
Soil Contact Guideline		-	-	26	NC	-	-	-	-	22	-	-	87	-	91	-	600	-	-
Nutrient and Energy Cycling Check		-	-	NC	NC	-	-	-	-	195	-	-	NC	-	350	-	834	-	-
Off-site Migration Check		-	-	140	NC	-	-	-	-	132	-	-	91	-	610	-	2,272	-	-

TABLE 1 (Continued)
METALS IN SOIL
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Sample No.	Date	Parameter (mg/kg)																	
		Molybdenum[3]	Nickel	Phosphorus	Potassium	Rubidium	Selenium	Silver[3]	Sodium	Strontium	Tellurium	Thallium	Tin[3]	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
EQL		*0.02*	*0.5*	*100*	*25*	*0.02*	*0.5*	*0.1*	*10*	*0.1*	*0.1*	*0.1*	*5*	*0.5*	*0.05*	*0.02*	*0.5*	*10*	*0.1*
Former Elmwoood/Nair Landfill																			
TP1-S1	26-Mar-12	0.724	22.6	370	2710	20.6	<0.50	0.19	311	71.4	<0.10	0.15	6.6	164	0.082	0.697	37.7	90	6.14
TP2-S2	26-Mar-12	0.615	10.4	270	1170	8.39	<0.50	<0.10	107	46.7	<0.10	<0.10	<5.0	119	0.128	0.45	16	75	1.41
TP3 S2	27-Mar-12	0.595	19.9	550	2860	18.8	<0.50	0.13	469	118	<0.10	0.14	42	306	0.153	0.772	38.3	93	4.64
TP4 S1	27-Mar-12	0.395	27.3	430	3530	28.7	<0.50	0.14	1170	55.4	<0.10	0.2	7.5	357	<0.050	0.92	56.9	49	12.6
TP5 S3	27-Mar-12	1.18	31.9	960	3390	26.5	<0.50	0.31	760	83.4	<0.10	0.2	**633**	247	0.158	0.944	48.5	**833**	11
TP6 S3	27-Mar-12	0.822	33.5	560	3710	27.4	0.54	0.17	621	89.9	<0.10	0.22	6.3	185	0.055	1.03	58.3	93	8.67
TP101 S1 Field Dup of TP6 S3	27-Mar-12	0.872	34.4	560	3710	30.7	<0.50	0.14	571	75	<0.10	0.23	<5.0	142	<0.050	1.04	61	81	9
TP7 S2	27-Mar-12	0.714	38	560	4680	35.5	<0.50	0.15	487	82.6	<0.10	0.26	<5.0	353	0.051	1.11	61	79	9.67
TP8 S3	27-Mar-12	0.852	29	520	2720	21.2	<0.50	0.19	534	120	<0.10	0.18	5	244	0.102	0.839	43.2	155	7.54
TP9 S3	27-Mar-12	0.532	31.8	510	3690	30	<0.50	0.16	510	87.9	<0.10	0.22	5.4	302	0.06	1.14	50.6	76	10
TP10 S1	27-Mar-12	0.287	19.1	430	2590	16.1	<0.50	0.1	599	66.3	<0.10	0.14	<5.0	310	<0.050	0.894	32.4	37	10.2
TP11 S1	27-Mar-12	0.45	26.2	510	3810	25.3	<0.50	0.13	492	103	<0.10	0.17	<5.0	287	0.135	1.13	49.8	75	7.45
TP12 S3	27-Mar-12	0.678	39.2	540	4670	38.2	<0.50	0.38	417	71.4	<0.10	0.26	<5.0	236	0.054	1.28	70.6	79	9.78
TP13 S3	27-Mar-12	0.446	28	570	3540	26.1	<0.50	0.1	536	93.8	<0.10	0.19	<5.0	325	0.055	1.06	51.7	51	7.38
TP14 S2	27-Mar-12	0.729	32.7	450	4090	31.5	<0.50	0.16	253	120	<0.10	0.22	13.3	183	<0.050	1	58.3	79	11.5
TP15 S2	27-Mar-12	0.781	31.6	460	3490	29.9	<0.50	0.14	457	81.3	<0.10	0.22	<5.0	195	<0.050	1.08	56.8	67	11.4
TP16 S3	27-Mar-12	1.4	34.6	500	3090	24.5	<0.50	0.22	878	111	<0.10	0.17	14.4	162	0.07	1.04	43.8	108	9.39
TP17 S1	27-Mar-12	0.588	34.1	450	4300	31.1	<0.50	0.22	433	128	<0.10	0.21	5.7	163	0.088	0.866	58.1	114	10.7
TP18 S2	27-Mar-12	1.88	41.2	600	4130	32.1	0.63	0.3	983	175	<0.10	0.24	22.2	192	0.069	1.3	60.9	**388**	14.6
TP19 S2	27-Mar-12	0.876	36.6	500	4230	34.2	0.51	0.19	853	129	<0.10	0.23	5.1	189	<0.050	1.18	64.4	92	13.3
TP20 S1	27-Mar-12	0.495	29.8	480	3880	30.5	<0.50	0.13	294	81	<0.10	0.22	<5.0	217	0.054	0.951	57.6	63	10.4
TP21 S3	27-Mar-12	0.483	24	470	2810	23.7	<0.50	<0.10	665	78.9	<0.10	0.17	<5.0	283	0.057	1.21	42.7	44	8
TP22 S3	27-Mar-12	0.705	38.2	510	4380	38.2	0.55	0.17	501	74.3	<0.10	0.26	<5.0	198	<0.050	1.19	65.6	74	12
TP23 S3	27-Mar-12	0.655	28.3	500	3390	26.7	<0.50	0.15	457	75.6	<0.10	0.19	<5.0	249	0.062	0.975	49	62	8.32
TP102 S2 Field Dup of TP23 S3	27-Mar-12	0.454	28.6	470	3640	27.4	<0.50	0.13	533	74.3	<0.10	0.19	5.5	195	<0.050	0.977	50.1	65	9.42
TP24 S1	27-Mar-12	0.437	35.1	490	4890	36.7	<0.50	0.15	638	113	<0.10	0.24	<5.0	304	0.07	0.862	69.7	86	8.79
TP25 S3	27-Mar-12	0.614	31.6	520	4160	32.2	<0.50	0.14	943	77.3	<0.10	0.22	<5.0	420	<0.050	1.1	54.8	72	11.6
TP26 S3	27-Mar-12	0.359	21.9	500	2980	21	<0.50	<0.10	392	87	<0.10	0.16	<5.0	274	0.054	0.814	38	56	5.45
Pipeline																			
PL COMP S1	28-Mar-12	0.659	13.1	360	1520	11.30	<0.50	0.33	190	61.00	<0.10	<0.10	<5.0	168	0.346	0.48	22.6	72	1.26
PL COMP S2	28-Mar-12	0.565	20.9	410	2760	21.90	<0.50	0.10	396	58.10	<0.10	0.16	<5.0	189	0.066	0.783	38.5	101	6.12
PL COMP S3	28-Mar-12	0.413	28.6	520	4360	30.90	<0.50	0.11	348	59.80	<0.10	0.23	<5.0	153	<0.050	0.989	56.1	82	6.66
PL COMP S4	28-Mar-12	0.505	34.6	510	4590	39.30	<0.50	0.16	490	68.20	<0.10	0.30	<5.0	524	<0.050	1.01	65.4	94	14.8
PL COMP S5	28-Mar-12	0.642	23.7	450	3150	25.60	<0.50	0.13	453	83.80	<0.10	0.19	<5.0	178	0.063	0.875	48.6	82	8.26
PL COMP S6	28-Mar-12	0.561	6.39	220	626	5.15	<0.50	<0.10	141	45.80	<0.10	<0.10	<5.0	143	0.19	0.321	11.2	68	1.47
Wenzel Road																			
WENZEL COMP S1	28-Mar-12	1.38	41.6	450	3660	33.90	0.66	0.17	402	73.70	<0.10	0.24	<5.0	121	<0.050	1.51	63.5	81	14.5
WENZEL COMP S2	28-Mar-12	1.11	34.5	450	3490	32.20	1.35	0.18	312	69.80	<0.10	0.23	<5.0	75.1	<0.050	1.62	57.1	76	13.6
WENZEL COMP S3	28-Mar-12	0.305	30.6	430	3440	33.10	<0.50	0.13	233	57.40	<0.10	0.24	<5.0	203	<0.050	0.757	61.1	70	10.3
WENZEL COMP S4	28-Mar-12	0.314	22.8	340	2890	21.90	<0.50	<0.10	187	42.50	<0.10	0.17	<5.0	86.8	<0.050	0.771	40.8	55	8.33
WENZEL COMP S5	28-Mar-12	1.53	42.4	490	4100	35.80	0.69	0.17	379	68.20	0.1	0.27	<5.0	77.8	<0.050	1.52	68.2	90	14.5
WENZEL COMP S6	28-Mar-12	0.572	26	410	2860	26.40	<0.50	0.13	395	58.60	<0.10	0.20	<5.0	163	<0.050	1.04	48.3	63	9.13
Redonda Road																			
REDONDA COMPOSITE S1	26-Mar-12	0.708	14.2	350	1600	12.1	<0.50	<0.10	319	68.1	<0.10	<0.10	<5.0	157	0.156	0.567	22.3	78	2.96
REDONDA COMPOSITE S2	26-Mar-12	0.806	17	370	2010	14.7	<0.50	0.22	458	75.9	<0.10	0.12	<5.0	175	0.103	0.639	28.2	76	3.83
REDONDA COMPOSITE S3	26-Mar-12	0.744	24.1	680	2910	22.3	<0.50	0.19	549	111	<0.10	0.18	<5.0	206	0.078	0.962	43.5	83	7.29
REDONDA COMPOSITE S4	26-Mar-12	0.762	22.7	420	2310	16.8	<0.50	0.1	386	85.8	<0.10	0.13	<5.0	158	0.093	0.757	32.5	82	4.68
REDONDA COMPOSITE S5	26-Mar-12	0.769	17.3	360	1900	13.9	<0.50	0.1	395	75.4	<0.10	0.1	<5.0	167	0.131	0.634	27.2	78	3.86
REDONDA COMPOSITE S6	26-Mar-12	0.531	28.1	430	3490	27	<0.50	0.12	509	84.7	<0.10	0.21	<5.0	199	0.06	0.961	53.9	75	8.34
REDONDA COMPOSITE S6/JAR	26-Mar-12	0.545	26.5	430	3240	25.1	<0.50	0.13	538	96.5	<0.10	0.19	<5.0	183	0.062	0.918	49	78	8.01
REDONDA COMPOSITE S1/JAR	26-Mar-12	0.929	16.3	370	1820	14.5	<0.50	<0.10	374	71.8	<0.10	0.11	9.4	189	0.156	0.603	26.9	81	3.58
CCME - Canadian Soil Quality Guidelines[1] - Residential / Parkland Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		10	50	-	-	-	1	20	-	-		1[3]	50	-		23	130	200	
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[4]		-	NC	-	-	-	80	-	-	-		NC	-	-		23	NC	NC	
Environmental Health Guidelines																			
Soil Contact Guideline		-	50	-	-	-	1	-	-	-		1.4	-	-		500	130	200	
Nutrient and Energy Cycling Check		-	146	-	-	-	NC	-	-	-		NC	-	-		NC	255	200	
CCME - Canadian Soil Quality Guidelines[1] - Commercial Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		40	50	-	-	-	2.9	40	-	-		1[3]	300	-		33	130	360	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[4]		-	NC	-	-	-	125	-	-	-		NC	-	-		33	NC	NC	-
Environmental Health Guidelines																			
Soil Contact Guideline		-	50	-	-	-	2.9	-	-	-		3.6	-	-		2000	130	360	-
Nutrient and Energy Cycling Check		-	182	-	-	-	NC	-	-	-		NC	-	-		NC	255	320	-
CCME - Canadian Soil Quality Guidelines[1] - Industrial Land Use																			
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA		40	50	-	-	-	2.9	40	-	-		1[3]	300	-		300	130	360	-
Tier I Site Specific Criteria (For Pathways Applicable to Site)																			
Human Health Guidelines																			
Soil Ingestion Guideline[4]		-	NC	-	-	-	4050	-	-	-		NC	-	-		510	NC	NC	-
Off-site Migration Check		-	NC	-	-	-	1135	-	-	-		NC	-	-		300	NC	NC	-
Environmental Health Guidelines																			
Soil Contact Guideline		-	50	-	-	-	2.9	-	-	-		3.6	-	-		2000	130	360	-
Nutrient and Energy Cycling Check		-	182	-	-	-	NC	-	-	-		NC	-	-		NC	255	320	-
Off-site Migration Check		-	NC	-	-	-	5	-	-	-		140	-	-		7100	830	1000	-

TABLE 1 (Continued)
METALS IN SOIL
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Notes:
EQL = Estimated Quantitation Limit = The lowest level of the parameter that can be quantified with confidence.
"-" = No Data
NC = Not Calculated

1. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 1999, Updated 7.0 - 2007. Revised 2009.
2. Provisional guideline. (Hexavalent Chromium and Thallium)
3. Interim remediation criteria for soil (mg/kg) that have not yet been replaced by Canadian Soil Quality Guidelines.
4. Selenium pathway names are from the new protocol (derived in 2006), however, some of the pathway names from the old guideline and the new guideline are interchangeable. Use old pathway names instead of the new ones because all of the inorganics with the exception of Selenium use the old guideline pathway names. The interchangeable pathway names are as follow:

Old Guideline	New Guideline
Soil Ingestion Guideline	Direct contact (SQG_{DH})

	- Exceedance of Residential Criteria
BOLD	- Exceedance of Commercial Criteria
UNDERLINE	- Exceedance of Industrial Criteria

TABLE 2
PETROLEUM HYDROCARBONS IN SOIL
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Sample No. [2]	Depth (m)	Soil Type	Moisture Content (%)	Parameter [1]								
				Benzene	Toluene	Ethylbenzene	Xylenes (o,-m,-p)	F1 (C6 - C10)	F2 (C10 - C16)	F3 (C16 - C34)	F4 (C34 - C50)	Total Hydrocarbons (C_6 - C_{50})
Former Elmwood/Nair Landfill												
TP3 S2/JAR	0.61	Fill	18	<0.0050	<0.050	<0.015	<0.10	<10	12	105	182	299
TP5 S3/JAR	0.91	Fill	31	<0.0050	<0.050	<0.015	<0.10	<10	18	82	94	194
TP9 S3/JAR	0.91	Fill	21	<0.0050	<0.050	<0.015	<0.10	<10	<10	<50	52	52
TP15 S2/JAR	0.61	Fill	19	<0.0050	<0.050	<0.015	<0.10	<10	12	86	67	165
TP21 S3/JAR	0.91	Fill	27	<0.0050	<0.050	<0.015	<0.10	<10	15	<50	<50	<50
TP26 S3/JAR	0.91	Fill	16	<0.0050	<0.050	<0.015	<0.10	<10	13	78	83	174
Pipeline Road												
PL COMP S2	0.61	Fill	21	<0.0050	<0.050	<0.015	<0.10	<10	<10	78	82	160
PL COMP S5	1.52	Fill	23	<0.0050	<0.050	<0.015	<0.10	<10	<10	53	68	121
Wenzel Road												
WENZEL COMP S1	0.61	Fill	29	<0.0050	<0.050	<0.015	<0.10	<10	<10	<50	<50	<50
WENZEL COMP S4	1.22	Fill	20	<0.0050	<0.050	<0.015	<0.10	<10	67	**1,770**	1,560	3,400
Redonda Road												
REDONDA COMPOSITE S6/JAR	Surface	Fill	20	<0.0050	<0.050	<0.015	<0.10	<10	21	68	96	185
REDONDA COMPOSITE S1/JAR	Surface	Fill	18	<0.0050	<0.050	<0.015	<0.10	<10	15	311	568	894
EQL				*0.005*	*0.050*	*0.015*	*0.10*	*10*	*10*	*50*	*50*	*50*
CCME Guidelines [3,4] - Residential Land Use, Surface Soil (<1.5 m) - Coarse Grained Soil Type												
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA				**0.0095**	**0.1**	**0.082**	**11**	**30**	**150**	**300**	**2,800**	**NA**
TIER I SITE SPECIFIC CRITERIA (For Pathways Applicable to Site)												
Soil Ingestion Guideline				11	22,000	10,000	150,000	-	-	-	-	-
Soil Dermal Contact Guideline				25	220,000	58,000	NA	-	-	-	-	-
Inhalation of Indoor Air Check (basement)				0.015	200	88	22	40	190	NA	NA	-
Inhalation of Indoor Air Check (slab on grade)				0.0095	120	55	14	30	150	NA	NA	-
Groundwater Check (drinking water) [a]				0.03	0.37	0.082	11	240	320	NA	NA	-
Soil Contact Guideline [b]				31	75	55	95	210	150	300	2,800	-
Groundwater Check (aquatic life) [d]				1	0.1	50	37	1,800	600	NA	NA	-
Direct Contact (Ingestion+Dermal Contact)				-	-	-	-	12,000	6,800	15,000	21,000	-
Management Limit [e]				-	-	-	-	700	1,000	2,500	10,000	-
CCME Guidelines [3,4] - Commercial Land Use Criteria for Surface Soil (<1.5 m) - Coarse Grained Soil Type												
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA				**0.03**	**0.1**	**0.082**	**11**	**240 [5]**	**260**	**1,700**	**3,300**	-
TIER I SITE SPECIFIC CRITERIA (For Pathways Applicable to Site)												
Soil Ingestion Guideline				11	82,000	36,000	560,000	-	-	-	-	-
Soil Dermal Contact Guideline				25	790,000	210,000	NA	-	-	-	-	-
Inhalation of Indoor Air Check (slab on grade)				0.03	1,400	630	160	-	-	-	-	-
Groundwater Check (drinking water) [a]				0.03	0.37	0.082	11	240	320	NA	NA	-
Soil Contact Guideline [b]				180	250	300	350	320	260	1,700	3,300	-
Groundwater Check (aquatic life) [d]				1	0.1	50	37	1,800	600	NA	NA	-
Direct Contact (Ingestion+Dermal Contact)				-	-	-	-	19,000	10,000	23,000	RES	-
Vapour Inhalation (indoor) [5]				-	-	-	-	320	1,700	NA	NA	-
Offsite Migration				-	-	-	-	NA	NA	4,300	RES	-
Management Limit [e]				-	-	-	-	700	1,000	3,500	10,000	-
CCME Guidelines [3,4] - Industrial Land Use Criteria for Surface Soil (<1.5 m) - Coarse Grained Soil Type												
TIER I GOVERNING OBJECTIVES GENERIC CRITERIA				**0.03**	**0.1**	**0.082**	**11**	**240 [5]**	**260**	**1,700**	**3,300**	-
TIER I SITE SPECIFIC CRITERIA (For Pathways Applicable to Site)												
Soil Ingestion Guideline				11	NA	620,000	NA	-	-	-	-	-
Soil Dermal Contact Guideline				25	NA	560,000	NA	-	-	-	-	-
Inhalation of Indoor Air Check (slab on grade)				0.03	1,400	630	160	-	-	-	-	-
Groundwater Check (drinking water) [a]				0.03	0.37	0.082	11	240	320	NA	NA	-
Soil Contact Guideline [b]				180	250	300	350	320	260	1,700	3,300	-
Off-site migration Check				NC	NC	NC	NC	NA	NA	4,300	RES	-
Groundwater Check (aquatic life) [d]				1	0.1	50	37	1,800	600	NA	NA	-
Vapour Inhalation (indoor) [5]				-	-	-	-	320	1,700	NA	NA	-
Management Limit [e]				-	-	-	-	700	1,000	3,500	10,000	-

TABLE 2 (Continued)
PETROLEUM HYDROCARBONS IN SOIL
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Notes:
"-" = No Data
EQL = Estimated Quantitation Limit = The lowest level of the parameter that can be quantified with confidence.
NA = Not Applicable. Calculated value exceeds 1,000,000 kg/mg or pathway excluded.
NC = Not calculated. Insufficient data to allow derivation.

RES = Residual PHC formation. Calculated value exceeds 30,000 mg/kg and solubility limit for PHC fraction.

1. All values are expressed in milligrams per kilogram (mg/kg).
2. Soil samples obtained on March 27, 2012
3. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 1999. Update 7.0 - 2007.
   Chapter 7 - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health.
4. CCME - Canadian Council of Ministers of the Environment. Canada-Wide Standards for Petroleum Hydrocarbons (PHCs) in Soil, May 2001 - revised January 2008.

a. Assumes site is underlain by groundwater of potable quality in sufficient yield (K of $1C^{-4}$ cm/sec or greater).
b. For depths between 0 and 1.5 meters below ground level, the terrestrial ecological pathway must be applied.
   A management limit has been developed for PHC that must be applied at all depths if the ecological pathway is removed.
   CCME does not specify for depths between 1.5 and 3 meters bgl.
c. Generally applicable for this land use as related to use of dugouts and wells for supply of livestock water.
d. Assumes surface water body at 10 m from site.
e. Includes additional considerations such as free phase formation, explosive hazards, and buried infrastructure effects.
5. Refer to Basement or Slab-on-Grade value. (Note For Residential Criteria Only)

	- Exceedance of Residential Criteria
BOLD	- Exceedance of Commercial Criteria
UNDERLINE	- Exceedance of Industrial Criteria

TABLE 3
POLYCYCLIC AROMATIC HYDROCARBONS IN SOIL
HUMAN HEALTH
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Sample No.	Date	Depth (m)	Soil Type	Moisture Content (%)	Parameters (mg/kg)[5]							CCME[1] - Human Health Guidelines/Check Values Based on Carcinogenic Effects of PAHs			
												Direct Contact[2] (SQG_{DH}) - ingestion, inhalation, and dermal exposures B[a]P TPE [3]		Protection of potable water (SQG_{PW}) IACR [4]	IACR (CCME) - Lab
					Benzo(a) anthracene	Benzo(a) pyrene	Benzo (b+j+k) fluoranthene	Chrysene	Benzo (g,h,i) perylene	Dibenzo (a,h) anthracene	Indeno (1,2,3-c,d) pyrene	$1x10^{-6}$ incremental lifetime cancer risk	$1X10^{-5}$ incremental lifetime cancer risk		
B[a]P Potency Equivalence Factors (PEFs)					0.1	1	0.1	0.01	0.01	1	0.1	0.6	5.3	-	-
Former Elmwood/Nair Landfill															
TP3 S2/JAR	27-Mar-12	0.61	Fill	19	0.032	0.035	0.071	0.037	0.031	0.005	0.025	0.0537	0.0537	0.6894	0.7
TP5 S3/JAR	27-Mar-12	0.91	Fill	21	0.028	0.035	0.067	0.033	0.020	<0.0050	0.024	0.0524	0.0524	0.6475	0.66
TP9 S3/JAR	27-Mar-12	0.91	Fill	16	0.010	<0.010	<0.014	<0.010	<0.010	<0.0050	<0.010	0.0186	0.0186	0.1765	0.18
TP15 S2/JAR	27-Mar-12	0.61	Fill	27	<0.010	<0.010	<0.014	0.010	<0.010	<0.0050	<0.010	0.0186	0.0186	0.1765	0.16
TP21 S3/JAR	27-Mar-12	0.91	Fill	18	<0.010	<0.010	<0.014	<0.010	<0.010	<0.0050	<0.010	0.0186	0.0186	0.1765	<0.15
TP26 S3/JAR	27-Mar-12	0.91	Fill	31	<0.010	<0.010	<0.014	0.011	0.020	<0.0050	<0.010	0.0187	0.0187	0.1785	<0.15
Pipeline Road															
PL COMP S2	28-Mar-12	0.61	Fill	21	0.042	0.042	0.066	0.037	0.025	0.007	0.042	0.065	0.0645	0.7201	0.73
PL COMP S5	28-Mar-12	1.52	Fill	23	0.021	0.022	0.031	0.018	0.026	<0.0050	0.041	0.037	0.0367	0.3662	0.39
Wenzel Road															
WENZEL COMP S1	28-Mar-12	0.61	Fill	29	<0.010	<0.010	<0.014	<0.010	<0.010	<0.0050	<0.010	0.019	0.0186	0.1765	<0.15
WENZEL COMP S4	28-Mar-12	1.22	Fill	20	<0.10 *	0.183	0.193	<0.15 *	0.203	0.093	0.027	0.312	0.3118	2.5208	2.37
Redonda Road															
REDONDA COMPOSITE S6/JAR	26-Mar-12	Surface	Fill	20	0.02	0.02	0.05	0.02	0.02	0.01	0.02	0.0342	0.0342	0.4482	0.46
REDONDA COMPOSITE S1/JAR	26-Mar-12	Surface	Fill	18	0.14	0.12	0.27	0.12	0.13	0.02	0.15	0.2000	0.2000	2.6628	2.66
EQL					*0.010*	*0.010*	*0.014*	*0.010*	*0.010*	*0.005*	*0.010*	-	-	-	*0.15*

TABLE 3 (Continued)
POLYCYCLIC AROMATIC HYDROCARBONS IN SOIL
HUMAN HEALTH
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Notes:

* = Detection Limit Adjusted For Sample Matrix Effects

EQL = Estimated Quantitation Limit = The lowest level of the parameter that can be quantified with confidence.

IACR = Index of Additive Cancer Risk

B[a]P TP = Benzo[a]pyrene Total Potency Equivalents

SQG_{DH} = human health-based soil quality guideline for direct contact

SQG_{PW} = soil quality guideline for the protection of potable water

1. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 2008, revised 2010.
   Chapter 7 - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health for all Land Uses.
2. Guideline values for toddler pica soil ingestion have been calculated for benzo[a]pyrene, acenaphthene, fluorene, anthracene and fluoranthene, but are several orders of magnitude higher than the direct contact guidelines.
   For more details on the pica guidelines, refer to section 7.1.4 of the scientific supporting document (CCME, 2008a).
3. B[a]P TPE = Benzo[a]pyrene Total Potency Equivalents, which is the sum of estimated cancer potency relative to B[a]p for all potentially carcinogenic unsubstituted PAHs.
   The B[a]P TPE for a soil sample is calculated by multiplying the concentration of each PAH in the sample by its B[a]P Potency Equivalence Factor (PEF) and summing these products.
   B[a]P PEFs are order of magnitude estimates of carcinogenic potential and are based on the World Health Organization (WHO/IPCS 1998).
4. The Index of Additive Cancer Risk (IACR) assesses potential threats to potable groundwater water quality from leaching of carcinogenic PAH mixtures from soil.
   The IACR is calculated by dividing the soil concentration of each carcinogenic PAH by its soil quality guideline for protection of potable water component value to calculate a hazard index for each PAH, and then summing the hazards indices for the entire PAH mixture.
   The potable water component values were derived using a drinking water Maximum Allowable Concentration of 0.00001 mg/L for benzo[a]pyrene and the B[a]P PEFs, and the soil-to-groundwater model described in Appendix C of CCME (2006).
5. If analysis returns non-detects, then enter 1/2 the detection limit into the formulas.

-Exceedance of CCME Criteria

TABLE 4
POLYCYCLIC AROMATIC HYDROCARBONS IN SOIL
ENVIRONMENTAL HEALTH
FORMER ELMWOOD/NAIR LANDFILL AND REDONDA ROAD

Sample No. [1]	Depth (m)	Soil Type	Moisture Content (%)	1-Methyl Naphthalene	2-Methyl Naphthalene	Acenaphthene	Acenaphthylene	Acridine	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo (b&j) fluoranthene	Benzo (b) fluoranthene	Benzo (b+j+k) fluoranthene	Benzo (g,h,i) perylene	Benzo(k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoran-thene	Fluorene	Indeno (1,2,3-c,d) pyrene	Naphthalene	Phenanthrene	Pyrene	Quinoline
Former Elmwood/Nair Landfill																									
TP3 S2/JAR	0.61	Fill	19	<0.010	<0.010	<0.0050	<0.0050	<0.010	0.010	0.032	0.035	0.053	0.055	0.071	0.031	0.018	0.037	0.005	0.066	<0.010	0.025	0.015	0.039	0.058	<0.010
TP5 S3/JAR	0.91	Fill	21	<0.010	<0.010	<0.0050	<0.0050	<0.010	0.008	0.028	0.035	0.049	0.053	0.067	0.020	0.018	0.033	<0.0050	0.051	<0.010	0.024	0.013	0.032	0.050	<0.010
TP9 S3/JAR	0.91	Fill	16	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0040	0.010	<0.010	0.013	0.014	<0.014	<0.010	<0.010	<0.010	<0.0050	0.019	<0.010	<0.010	0.010	0.011	0.015	<0.010
TP15 S2/JAR	0.61	Fill	27	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0040	<0.010	<0.010	0.012	0.013	<0.014	<0.010	<0.010	0.010	<0.0050	0.019	<0.010	<0.010	0.011	0.011	0.014	<0.010
TP21 S3/JAR	0.91	Fill	18	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0040	<0.010	<0.010	<0.010	<0.010	<0.014	<0.010	<0.010	<0.010	<0.0050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
TP26 S3/JAR	0.91	Fill	31	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0040	<0.010	<0.010	<0.010	0.010	<0.014	0.020	<0.010	0.011	<0.0050	0.013	<0.010	<0.010	<0.010	<0.010	0.015	<0.010
Pipeline Road																									
PL COMP S2	0.61	Fill	21	<0.010	<0.010	0.005	<0.0050	<0.010	0.015	0.042	0.042	0.049	0.051	0.066	0.025	0.017	0.037	0.007	0.095	<0.010	0.042	<0.010	0.066	0.073	<0.010
PL COMP S5	1.52	Fill	23	<0.010	<0.010	<0.0050	<0.0050	<0.010	0.006	0.021	0.022	0.031	0.031	0.031	0.026	<0.010	0.018	<0.0050	0.040	<0.010	0.041	<0.010	<0.010	0.032	<0.010
Wenzel Road																									
WENZEL COMP S1	0.61	Fill	29	<0.010	<0.010	<0.0050	<0.0050	<0.010	<0.0040	<0.010	<0.010	<0.010	<0.010	<0.014	<0.010	<0.010	<0.010	<0.0050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
WENZEL COMP S4	1.22	Fill	20	<0.010	<0.010	0.009	<0.0050	<0.10 *	0.007	<0.10 *	0.183	0.175	0.180	0.193	0.203	0.018	<0.15 *	0.093	<0.10 *	<0.010	0.027	<0.010	0.055	0.278	<0.010
Redonda Road																									
REDONDA COMPOSITE S6/JAR	Surface	Fill	20	<0.010	<0.010	<0.0050	<0.0050	<0.010	0.011	0.023	0.019	0.031	0.033	0.045	0.024	0.014	0.019	0.006	0.040	<0.010	0.023	0.019	0.047	0.034	<0.010
REDONDA COMPOSITE S1/JAR	Surface	Fill	18	<0.010	0.014	0.01	0.01	<0.010	0.04	0.14	0.12	0.196	0.18	0.27	0.13	0.08	0.12	0.02	0.21	0.01	0.15	0.021	0.15	0.19	<0.010
EQL				*0.01*	*0.01*	*0.005*	*0.01*	*0.01*	*0.004*	*0.01*	*0.01*	*0.01*	*0.01*	*0.014*	*0.01*	*0.01*	*0.01*	*0.005*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
CCME Guidelines [3] - Residential/ Parkland Use																									
ENVIRONMENTAL HEALTH GUIDELINES																									
SQG_E [4]				-	-	NC	NC	-	2.5[9]	NC	20[12]	-	NC	-	NC	NC	NC	NC	50[9]	NC	NC	NC	NC	NC	-
Soil contact (SQG_{SC})				-	-	NC	NC	-	2.5	NC	20	-	NC	-	NC	NC	NC	NC	50	NC	NC	NC	NC	NC	-
Soil and food ingestion (SQG_I)				-	-	21.5[5]	NC	-	61.5[5]	6.2[5]	0.6[5]	-	6.2[5]	-	NC	6.2[5]	6.2[5]	NC	15.4[5]	15.4[5]	NC	8.8	43[5]	7.7[5]	-
Interim Soil Quality Criteria (CCME 1991)				-	-	no value	no value	-	no value	1[11]	0.7	-	1[11]	-	no value	1[11]	no value	1[11]	no value	no value	1[11]	0.6[14]	5[15]	10[16]	-
CCME Guidelines [3] - Commercial Land Use																									
ENVIRONMENTAL HEALTH GUIDELINES																									
SQG_E [4]				-	-	NC	NC	-	32[9]	NC	72[12]	-	NC	-	NC	NC	NC	NC	180[9]	NC	NC	NC	NC	NC	-
Soil contact (SQG_{SC})				-	-	NC	NC	-	32	NC	72	-	NC	-	NC	NC	NC	NC	180	NC	NC	NC	NC	NC	-
Interim Soil Quality Criteria (CCME 1991)				-	-	no value	no value	-	no value	10[11]	1.4	-	10[11]	-	no value	10[11]	no value	10[11]	no value	no value	10[11]	22[14]	50[15]	100[16]	-
CCME Guidelines [3] - Industrial Land Use																									
ENVIRONMENTAL HEALTH GUIDELINES																									
SQG_E [4]				-	-	NC	NC	-	32[9]	NC	72[12]	-	NC	-	NC	NC	NC	NC	180[9]	NC	NC	NC	NC	NC	-
Soil contact (SQG_{SC})				-	-	NC	NC	-	32	NC	72	-	NC	-	NC	NC	NC	NC	180	NC	NC	NC	NC	NC	-
Interim Soil Quality Criteria (CCME 1991)				-	-	no value	no value	-	no value	10[11]	1.4	-	10[11]	-	no value	10[11]	no value	10[11]	no value	no value	10[11]	22[14]	50[15]	100[16]	-

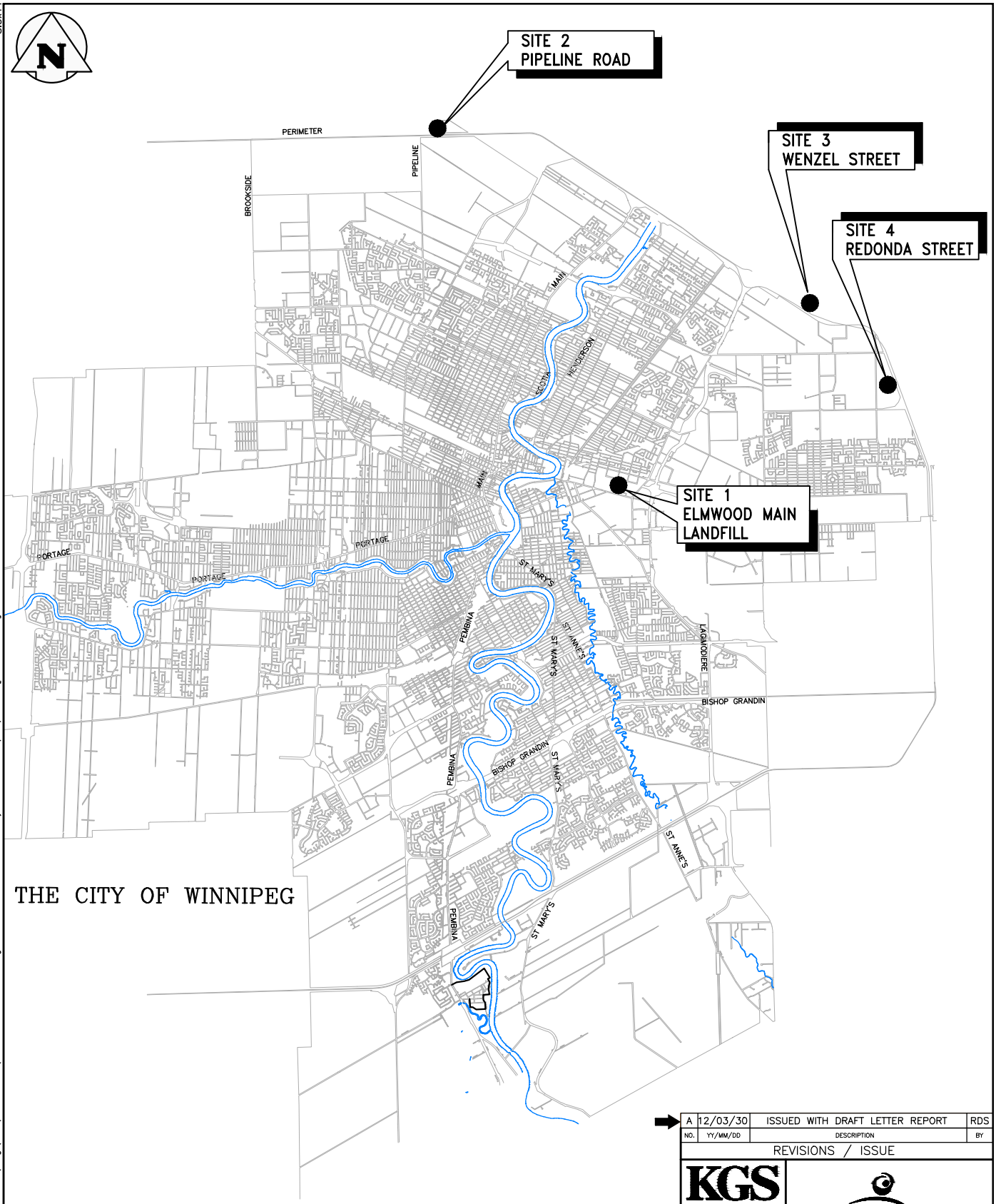
Notes:
'-' = No data
* = Detection Limit Adjusted For Sample Matrix Effects
EQL = Estimated Quantitation Limit = The lowest level of the parameter that can be quantified with confidence.
SQG_E = Soil Quality Guideline for Environmental Health
SQG_{SC} = Soil Quality Guideline for soil contact by soil-dependent organisms (e.g. plants and invertebrates)
SQG_I= Soil Quality Guideline for protection of livestock and wildlife based on soil and food ingestion
SQG_{FL}= Soil Quality Guideline for protection of freshwater life
NC = Not Calculated

1. Redonda Road soil samples obtained on March 26, 2012. Former Elmwood/Nair Landfill soil samples obtained on March 27, 2012.
2. All values are expressed in milligrams per kilogram (mg/kg).
3. CCME - Canadian Council of Ministers of the Environment - Canadian Environmental Quality Guidelines, 2008, revised 2010.
Chapter 7 - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health.
4. The SQG_E is based on the lowest of the available environmental health guidelines (soil contact, soil and food ingestion, or protection of freshwater life).
For PAHs where a soil contact guideline was not available, an overall SQG_E was not calculated.
5. This guideline is considered provisional because minimum data requirements, as outlined in CCME (2006), were not met. The value is presented
for users to consider applying at their own discretion, but it has not be used to determine the overall SQG_E recommended here.
6. Modeling assumptions include the absence of biodegradation of PAHs in the subsurface environment, a highly conservative assumption.
7. SQG_{FL} for freshwater life protection back-calculated based on CCME (2006) protocol, using pre-existing CCME Water Quality Guidelines (Freshwater Life) (CCME 1999).
8. SQG_{FL} for freshwater life protection guideline back-calculated from theoretically derived freshwater life thresholds based on baseline (narcosis-type)
toxicity along with a Critical Body Residue (CBR) approach, assuming an internalized dose for aquatic life of 3.0 mmol PAH/kg lipid is a threshold for chronic, non-lethal toxicity.
9. The SQG_E is based on the soil contact guideline value.
10. A freshwater life protective guideline could not be calculated based on the assumed generic site/soil properties and the K_{SC} of the PAH, since the
concentration in the groundwater at the point of leaching would need to far exceed the solubility limit to account for a concentration that approaches
the toxicity threshold at a point 10 m down-gradient.
11. The interim soil quality criterion (CCME 1991) is retained as the environmental soil quality guideline for this land use because there was
insufficient/inadequate data to calculate an SQG_E or provisional SQG_E. Consult the human health guidelines/check values to assess the human
hazard of PAH mixtures containing this PAH.
12. The SQG_E is based on the soil contact guideline value. The 2008 benzo[a]pyrene SQG_E replaces the 1997 provisional benzo[a]pyrene SQG_E.
Consult the human health guidelines/check values to assess the human hazard of PAH mixtures containing this PAH.
13. Users may wish to consider the application, on a site-specific basis, of the Soil Quality Guideline for the Protection of Freshwater Life where
potential impacts on nearby surface water are a concern. This guideline value may be less than the common limit of detection in some
jurisdictions. Consult appropriate jurisdiction for further guidance.
14. Data were insufficient/inadequate to update the 1997 provisional SQG_E and no attempt was made to calculate a SQG_{HH} or provisional SQG_{HH},
therefore the 1997 provisional SQG_E is retained as the soil quality guideline for the protection of environmental health for this land use.
However, if there is concern for potential impacts to water bodies, the Soil Quality Guideline for the Protection of Freshwater Life (SQG_{FL}) should be
applied. Consult other jurisdictions for the protection of human health from naphthalene.
15. Data were insufficient / inadequate to calculate an SQG_E or provisional SQGE and no attempt was made to calculate a SQG_{HH} or provisional SQG_{HH},
therefore the interim soil criterion (CCME 1991) is retained as the environmental soil quality guideline for this land use. However, if there is concern for
potential impacts to water bodies, the Soil Quality Guideline for the Protection of Freshwater Life (SQGFL) should be applied. Consult other
jurisdictions for the protection of human health from phenanthrene.
16. Data were insufficient / inadequate to calculate an SQG_E or provisional SQGE and no attempt was made to calculate a SQG_{HH} or provisional SQG_{HH},
therefore the interim soil criterion (CCME 1991) is retained as the environmental soil quality guideline for this land use. Consult other jurisdictions for the
protection of human health from pyrene.

	- Exceedance of Residential Criteria
BOLD	- Exceedance of Commercial Criteria
UNDERLINE	- Exceedance of Industrial Criteria

TABLE 4
POLYCYCLIC AROMATIC HYDROCARBONS IN SOIL
ENVIRONMENTAL HEALTH
FORMER ELWOOD/NAIR LANDFILL
AND REDONDA ROAD

FIGURES



NO.	YY/MM/DD	DESCRIPTION	BY
A	12/03/30	ISSUED WITH DRAFT LETTER REPORT	RDS

REVISIONS / ISSUE

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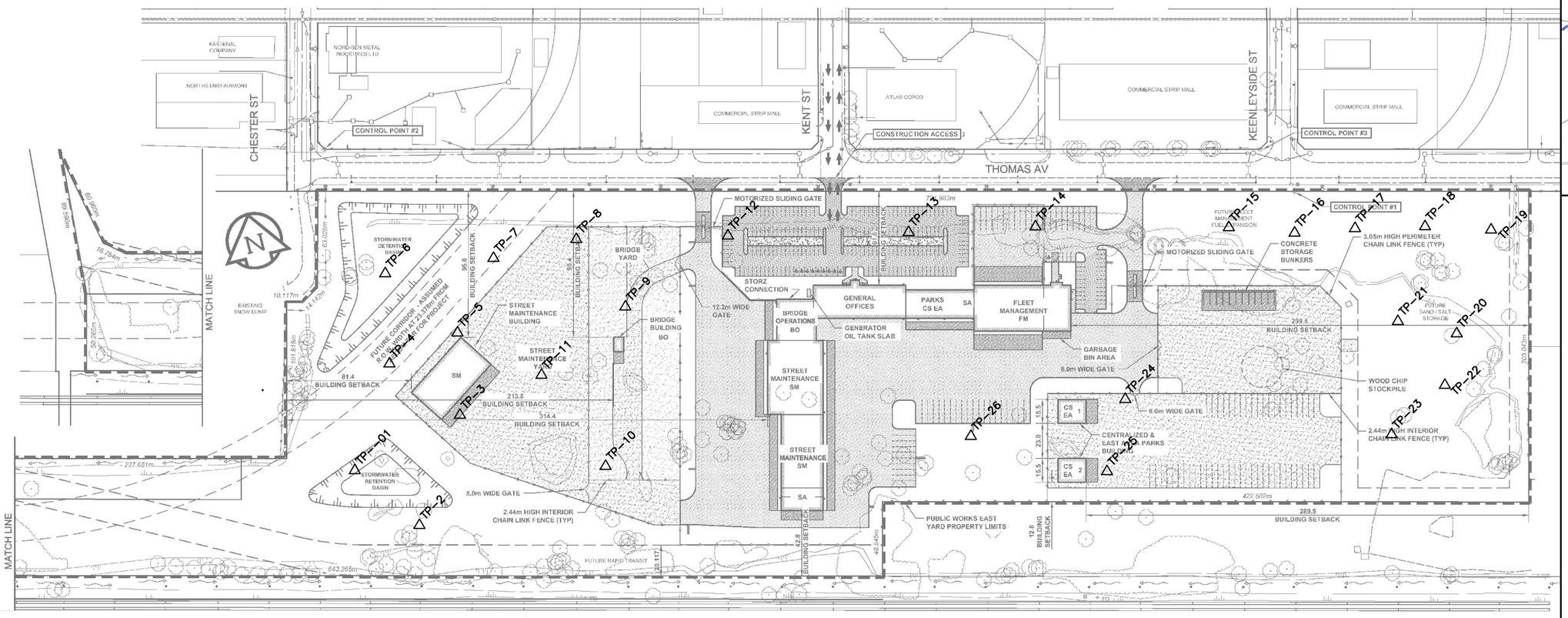
SOIL QUALITY ASSESSMENT
FORMER ELMWOOD\NAIRN LANDFILL SITE

SITE LOCATION PLAN

MARCH 2012 | FIGURE 01 | REV: A

8.5x11

FileName: P:\Projects\2012\12-0107-004\Dwg\Env\Revision A\12-0107-04-F01.dwg – Tab: FIG 01 Plotted By: PDeffner 03/30/2012 [Fri 11:32am]



CNR MAIN LINE

SITE PLAN

SCALE: 1:1250

0 25 50m

NOTES:

- CIVIC ADDRESS - #980 THOMAS AVENUE
- TOTAL LOT AREA = 202,354m² (50.0 ACRES)
- LEGAL DESCRIPTION: ALL THOSE PORTIONS OF RIVER LOTS 72, 73 AND 74 OF THE PARISH OF ST BONIFACE LYING TO THE NORTH OF NORTHERN LIMIT OF CNR RIGHT OF WAY PLAN 7459 WLTO WHICH LIES TO THE EAST OF THE EASTERN LIMIT OF FOSTER STREET PLAN 9196 WLTO EXCEPTING THEREOUT PLAN 16198 WLTO AND PLAN 20704 WLTO.
- SIGNAGE - TO BE DETERMINED
- LIGHTING - SEE NOVA 3 DRAWINGS
- ADD 200.000m TO ABBREVIATED ELEVATIONS TO OBTAIN GEODETIC ELEVATIONS

BUILDING SIZES

• MAIN BUILDING		± 8224m² (88,522 ft²)
• SM BUILDING	± 48.5m x 26.5m	± 1285m² (13,830 ft²)
• BO BUILDING	± 6.5m x 9.5m	± 62m² (667 ft²)
• CS/EA 1 BUILDING	± 15.5m x 18.5m	± 287m² (3090 ft²)
• CS-EA 2 BUILDING	± 15.5m x 18.5m	± 287m² (3090 ft²)

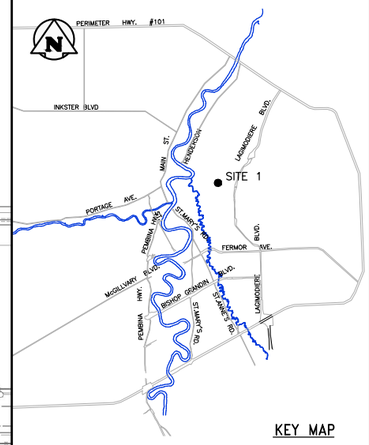
BUILDING SIZES LISTED ARE APPROXIMATE. SEE BUILDING CONSTRUCTION DRAWINGS FOR ACTUAL SIZES.

PARKING STALL SUMMARY:

- EMPLOYEE PARKING STALLS = 219 (2.7m x 6.1m)
- HANDICAP PARKING STALLS = 10 (3.6m x 6.1m)
- LARGE VEHICLE PARKING STALLS = 101 (3.7m x 15.3m)

LEGEND: DIVISIONS & SPECIAL OPERATING AREAS:

SM - STREETS MAINTENANCE DIVISION
CS - CENTRALIZED PARKS SERVICES DIVISION
EA - EAST AREA PARKS, PARKS & OPEN SPACES DIVISION
BO - BRIDGE OPERATIONS DIVISION
SA - SHARED AMENITIES
FM - WINNIPEG FLEET MANAGEMENT AGENCY



KEY MAP

LEGEND:

△TP-19 SOIL SAMPLE

NO.	YY/MM/DD	DESCRIPTION	BY
A	12/03/30	ISSUED WITH DRAFT LETTER REPORT	RDS

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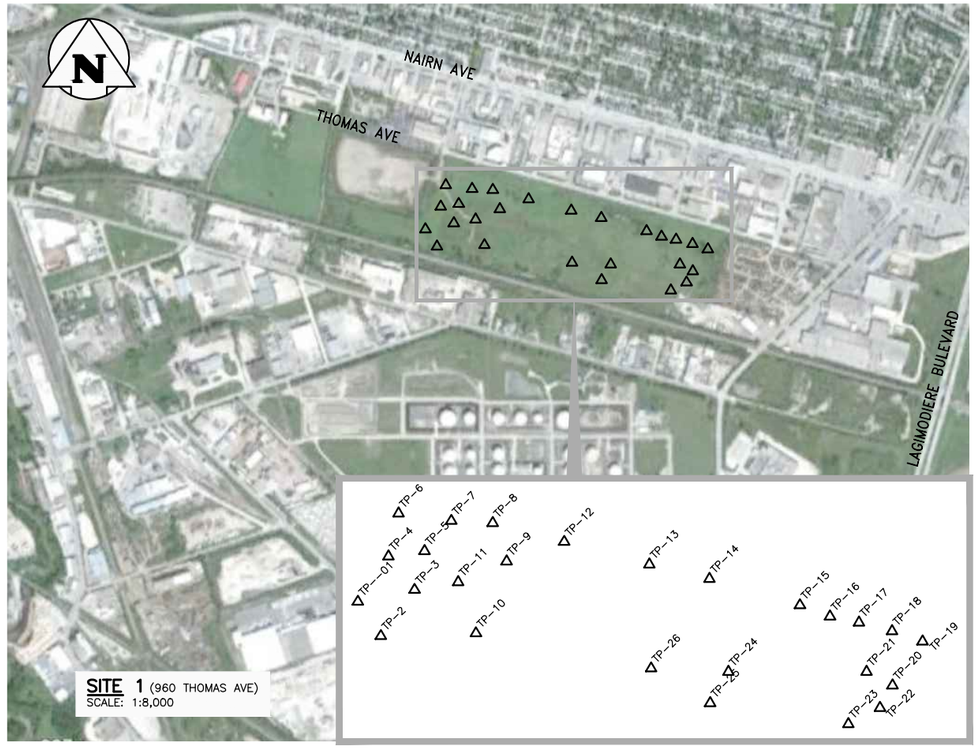
SOIL QUALITY ASSESSMENT
FOMER ELMWOOD\NAIRN LANDFILL SITE

SITE 1
560 THOMAS STREET
SOIL SAMPLE LOCATIONS

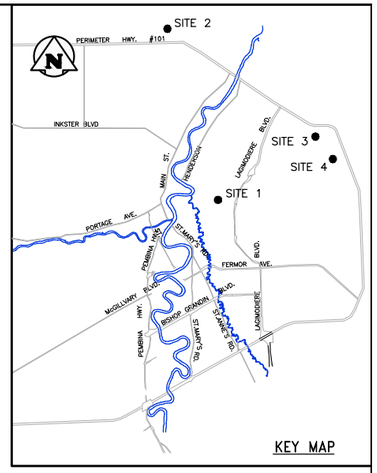
MARCH 2012 | FIGURE 02 | REV: A

FileName: P:\Projects\2012\12-0107-004\Dwg\Env\Revision A\12-0107-04-F02.dwg — Tab: F03 Plotted By: PDeffner 03/30/2012 [Fri 11:41am]



SITE 1 (960 THOMAS AVE)
SCALE: 1:8,000

SITE 2 (PIPELINE ROAD)
SCALE: 1:8,000



KEY MAP

LEGEND:
P-L S4 SOIL SAMPLE

SITE 3 (WENZEL ROAD)
SCALE: 1:8,000

SITE 4 (REDONDA STREET)
SCALE: 1:8,000

200 0 200 400 600m
SCALE: 1:8000 METRIC 24"x36"

NO.	YY/MM/DD	DESCRIPTION	BY
A	12/03/30	ISSUED WITH DRAFT LETTER REPORT	RDS

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Winnipeg

SOIL QUALITY ASSESSMENT
FOMER ELMWOOD\NAIRN LANDFILL SITE

SITE 1, 2, 3 AND 4
SOIL SAMPLE LOCATIONS

MARCH 2012 | FIGURE 03 | REV: A

APPENDICES

APPENDIX A

TEST PIT LOGS (MARCH 2012)

Test Pit Logs – March 2012
Former Elmwood/Nairn Landfill
960 Thomas Ave

Test Pit 1
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 2.8	14	5529088	0637169
S2 – 70cm – 2.2			
S3 – 100cm – 1.7			

Test Pit 2
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 0.4	14	5529042	0637200
S2 – 70cm – 0.8			
S3 – 100cm – 0.3			

Test Pit 3
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.
Staining @ 100cm, approximately 20cm thick, slight odor @ 100cm

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 0.1	14	5529104	0637245
S2 – 70-cm – 2.4			
S3 – 100cm – 1.8			
S4 – 135cm – 2.5			

Test Pit 4
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.
Staining @ 100cm, approximately 20cm thick, slight odor @ 100cm

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 0.8	14	5529149	0637210
S2 – 70cm – 0.5			
S3 – 100cm – 0.7			
S4 – 135cm – 0.6			

Test Pit 5
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.
Staining @100cm, approximately 20cm thick, slight odor @100cm

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 1.2	14	5529156	0637258
S2 – 70cm – 1.3			
S3 – 100cm – 2.1			
S4 – 135cm – 1.9			

Test Pit 6
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 2.1	14	5529207	0637223
S2 – 70cm – 2.6			
S3 – 100cm – 3.2			

Test Pit 7
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 5.7	14	5529197	0637294
S2 – 70cm – 21.2			
S3 – 100cm – 15.8			

Test Pit 8
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 16.1	14	5529194	0637350
S2 – 70cm – 17.7			
S3 – 100cm – 19.2			

Test Pit 9
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 16.5	14	5529142	0637368
S2 – 70cm – 19.4			
S3 – 100cm – 20.1			

Test Pit 10
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 5.4	14	5529046	0637327
S2 – 70cm – 3.7			
S3 – 100cm – 4.7			

Test Pit 11
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 6.8	14	5529115	0637303
S2 – 70cm – 6.5			
S3 – 100cm – 6.7			

Test Pit 12
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm– 4.3	14	5529169	0637446
S2 – 70cm – 4.4			
S3 – 100cm – 4.9			

Test Pit 13
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 5.0	14	5529138	0637560
S2 – 70cm – 7.5			
S3 – 100cm – 9.7			

Test Pit 14
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 5.2	14	5529119	0637641
S2 – 70cm – 11.5			
S3 – 100cm – 8.6			

Test Pit 15
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 23.4	14	5529084	0637762
S2 – 70cm – 33.7			
S3 – 100cm – 28.9			

Test Pit 16
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 8.5	14	5529068	0637803
S2 – 70cm – 8.3			
S3 – 100cm – 9.3			

Test Pit 17
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 9.6	14	5529060	0637841
S2 –70cm – 8.9			
S3 – 100cm – 6.2			

Test Pit 18
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 8.5	14	5529049	0637886
S2 – 70cm – 12.3			
S3 – 100cm – 11.2			

Test Pit 19
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 23.2	14	5529035	0637927
S2 – 70cm – 27.8			
S3 – 100cm – 18.3			

Test Pit 20
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 9.7	14	5528976	0637887
S2 – 70cm – 8.5			
S3 – 100cm – 8.3			

Test Pit 21
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 15.1	14	5528994	0637852
S2 – 70cm – 25.2			
S3 – 100cm – 38.2			

Test Pit 22
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 13.1	14	5528946	0637870
S2 – 70cm – 15.2			
S3 – 100cm – 17.4			

Test Pit 23
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 7.8	14	5528924	0637827
S2 – 70cm – 17.0			
3 – 100cm – 17.5			

Test Pit 24
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 8.1	14	5528994	0637666
S2 – 70cm – 6.5			
S3 – 100cm – 6.9			

Test Pit 25
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 2.0	14	5528952	0637642
S2 – 70cm – 2.4			
S3 – 100cm – 2.6			

Test Pit 26
Soil Log – Fill – Till with clay, black, damp, low plasticity, concrete and asphalt waste material, rebar.

Soil vapor reading (ppm)	**UTM**	**Northing**	**Easting**
S1 – 35cm – 27.2	14	5528999	0637563
S2 – 70cm – 25.1			
S3 – 100cm – 30.2			

APPENDIX B

LABORATORY ANALYTICAL RESULTS

KGS Group Consultants (Winnipeg)
ATTN: Rob Sinclair
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4

Date Received: 26-MAR-12
Report Date: 02-APR-12 15:48 (MT)
Version: FINAL

Client Phone: 204-896-1209

Certificate of Analysis

Lab Work Order #: L1127827

Project P.O. #: NOT SUBMITTED
Job Reference: REDONDA LANDFILL
C of C Numbers:
Legal Site Desc:

Paul Nicolas
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-1 REDONDA COMPOSITE S1							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.40		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	7490		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.63		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	2.73		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	96.9		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.34		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.099		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	13		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.238		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	94500		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.758		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	19.7		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	4.74		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	28.3		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	12100		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	46.4		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	34500		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	256		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.708		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	14.2		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	350		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	1600		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	12.1		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	319		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	68.1		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	157		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.156		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.567		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	22.3		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	78		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	2.96		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-2 REDONDA COMPOSITE S2							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.98		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	9020		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.54		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	2.99		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	96.8		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.36		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.090		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	13		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.222		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-2 REDONDA COMPOSITE S2							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Calcium (Ca)	101000		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.693		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	23.3		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	5.29		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	28.9		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	13200		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	43.2		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	36700		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	296		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.806		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	17.0		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	370		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	2010		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	14.7		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.22		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	458		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	75.9		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.12		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	175		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.103		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.639		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	28.2		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	76		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	3.83		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-3 REDONDA COMPOSITE S3							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	3.16		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	15100		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.62		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	4.60		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	208		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.70		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.137		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	22		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.258		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	75900		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.964		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	28.1		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	8.65		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	37.3		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	18700		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	76.3		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	30300		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	401		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.744		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-3 REDONDA COMPOSITE S3							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Nickel (Ni)	24.1		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	680		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	2910		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	22.3		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.19		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	549		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	111		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.18		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	206		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.078		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.962		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	43.5		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	83		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	7.29		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-4 REDONDA COMPOSITE S4							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.81		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	11100		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	1.68		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	9.77		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	133		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.43		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.114		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	15		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.220		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	88500		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.731		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	22.6		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	7.29		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	26.6		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	17900		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	75.9		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	34800		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	316		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.762		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	22.7		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	420		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	2310		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	16.8		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	386		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	85.8		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.13		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-4 REDONDA COMPOSITE S4							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	158		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.093		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.757		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	32.5		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	82		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	4.68		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-5 REDONDA COMPOSITE S5							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.34		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	8790		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.68		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	2.99		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	101		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.34		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.095		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	13		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.222		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	90400		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.654		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	21.7		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	5.36		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	30.4		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	12300		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	49.4		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	34700		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	264		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.769		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	17.3		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	360		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	1900		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	13.9		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	395		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	75.4		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	167		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.131		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.634		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	27.2		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	78		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	3.86		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-6 REDONDA COMPOSITE S6							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-6 REDONDA COMPOSITE S6							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	2.02		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	18300		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.61		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	5.47		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	172		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.66		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.167		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	18		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.240		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	63600		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	1.24		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	36.0		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	9.66		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	26.4		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	21900		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	61.7		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	27600		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	400		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.531		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	28.1		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	430		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	3490		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	27.0		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.12		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	509		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	84.7		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.21		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	199		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.060		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.961		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	53.9		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	75		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	8.34		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-7 TP1-S1							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.59		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	12900		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.49		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	4.19		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	131		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.56		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.138		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	13		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.313		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-7 TP1-S1							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Calcium (Ca)	74400		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.937		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	27.2		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	7.62		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	25.0		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	17100		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	51.8		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	28900		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	358		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.724		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	22.6		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	370		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	2710		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	20.6		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.19		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	311		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	71.4		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.15		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	6.6		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	164		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.082		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.697		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	37.7		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	90		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	6.14		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-8 TP2-S2							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.09		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	5050		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.38		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	2.16		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	47.9		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.20		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.048		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	<10		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.216		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	91800		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.440		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	17.0		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	3.18		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	19.8		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	8900		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	39.9		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	34100		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	195		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.615		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-8 TP2-S2							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Nickel (Ni)	10.4		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	270		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	1170		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	8.39		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	107		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	46.7		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	119		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.128		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.450		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	16.0		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	75		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	1.41		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
L1127827-9 REDONDA COMPOSITE S6/JAR							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Toluene	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Ethyl benzene	<0.015		0.015	mg/kg	27-MAR-12	29-MAR-12	R2345709
o-Xylene	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
m+p-Xylenes	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Xylenes	<0.10		0.10	mg/kg	27-MAR-12	29-MAR-12	R2345709
Surrogate: 4-Bromofluorobenzene (SS)	105.5		70-130	%	27-MAR-12	29-MAR-12	R2345709
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				27-MAR-12	27-MAR-12	R2343587
Prep/Analysis Dates					27-MAR-12	27-MAR-12	R2343587
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		02-APR-12	
F1-BTEX	<10		10	mg/kg		02-APR-12	
F2 (C10-C16)	21		10	mg/kg		02-APR-12	
F2-Naphth	21		10	mg/kg		02-APR-12	
F3 (C16-C34)	68		50	mg/kg		02-APR-12	
F3-PAH	68		50	mg/kg		02-APR-12	
F4 (C34-C50)	96		50	mg/kg		02-APR-12	
Total Hydrocarbons (C6-C50)	185		50	mg/kg		02-APR-12	
Miscellaneous Parameters							
% Moisture	20		0.10	%	27-MAR-12	28-MAR-12	R2343470
Metals							
Aluminum (Al)	16100		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	0.79		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	5.07		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	184		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.66		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.145		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	16		10	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-9 REDONDA COMPOSITE S6/JAR							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Cadmium (Cd)	0.236		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	66100		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	1.05		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	30.0		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	8.63		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	26.6		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	18900		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	59.0		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	28700		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Manganese (Mn)	389		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.545		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	26.5		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	430		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	3240		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	25.1		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	0.13		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	538		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	96.5		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.19		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	<5.0		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	183		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.062		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.918		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	49.0		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	78		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	8.01		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
2-Methyl Naphthalene	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acenaphthene	<0.0050		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acenaphthylene	<0.0050		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acridine	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Anthracene	0.0110		0.0040	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(a)anthracene	0.023		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(a)pyrene	0.019		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b)fluoranthene	0.033		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b&j)fluoranthene	0.031		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(g,h,i)perylene	0.024		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(k)fluoranthene	0.014		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Chrysene	0.019		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Dibenzo(a,h)anthracene	0.0057		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Fluoranthene	0.040		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Fluorene	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Indeno(1,2,3-cd)pyrene	0.023		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Naphthalene	0.019		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Phenanthrene	0.047		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Pyrene	0.034		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Quinoline	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
B(a)P Total Potency Equivalent	0.034		0.020	mg/kg	27-MAR-12	27-MAR-12	R2343677

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-9 REDONDA COMPOSITE S6/JAR							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
IACR (CCME)	0.46		0.15	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b+j+k)fluoranthene	0.045		0.014	mg/kg	27-MAR-12	27-MAR-12	R2343677
Surrogate: Acenaphthene d10	86.6		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Chrysene d12	68.7		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Naphthalene d8	117.1		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Phenanthrene d10	125.6		50-150	%	27-MAR-12	27-MAR-12	R2343677
L1127827-10 REDONDA COMPOSITE S1/JAR							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Toluene	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Ethyl benzene	<0.015		0.015	mg/kg	27-MAR-12	29-MAR-12	R2345709
o-Xylene	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
m+p-Xylenes	<0.050		0.050	mg/kg	27-MAR-12	29-MAR-12	R2345709
Xylenes	<0.10		0.10	mg/kg	27-MAR-12	29-MAR-12	R2345709
Surrogate: 4-Bromofluorobenzene (SS)	94.0		70-130	%	27-MAR-12	29-MAR-12	R2345709
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	NO				27-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					27-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		02-APR-12	
F1-BTEX	<10		10	mg/kg		02-APR-12	
F2 (C10-C16)	15		10	mg/kg		02-APR-12	
F2-Naphth	15		10	mg/kg		02-APR-12	
F3 (C16-C34)	311		50	mg/kg		02-APR-12	
F3-PAH	310		50	mg/kg		02-APR-12	
F4 (C34-C50)	568		50	mg/kg		02-APR-12	
F4G-SG (GHH-Silica)	2870		500	mg/kg		02-APR-12	
Total Hydrocarbons (C6-C50)	894		50	mg/kg		02-APR-12	
Miscellaneous Parameters							
% Moisture	18		0.10	%	27-MAR-12	28-MAR-12	R2343470
Prep/Analysis Dates						29-MAR-12	R2344882
Metals							
Aluminum (Al)	9010		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Antimony (Sb)	1.60		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Arsenic (As)	3.22		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Barium (Ba)	101		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Beryllium (Be)	0.30		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Bismuth (Bi)	0.110		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Boron (B)	14		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cadmium (Cd)	0.234		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Calcium (Ca)	102000		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cesium (Cs)	0.728		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Chromium (Cr)	23.4		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Cobalt (Co)	5.16		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Copper (Cu)	28.9		1.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Iron (Fe)	13100		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Lead (Pb)	269		0.20	mg/kg	28-MAR-12	28-MAR-12	R2344069
Magnesium (Mg)	36500		10	mg/kg	28-MAR-12	28-MAR-12	R2344069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1127827-10 REDONDA COMPOSITE S1/JAR							
Sampled By: CLIENT on 26-MAR-12 @ 16:00							
Matrix: SOIL							
Metals							
Manganese (Mn)	281		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Molybdenum (Mo)	0.929		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Nickel (Ni)	16.3		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Phosphorus (P)	370		100	mg/kg	28-MAR-12	28-MAR-12	R2344069
Potassium (K)	1820		25	mg/kg	28-MAR-12	28-MAR-12	R2344069
Rubidium (Rb)	14.5		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Selenium (Se)	<0.50		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Silver (Ag)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Sodium (Na)	374		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Strontium (Sr)	71.8		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tellurium (Te)	<0.10		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Thallium (Tl)	0.11		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tin (Sn)	9.4		5.0	mg/kg	28-MAR-12	28-MAR-12	R2344069
Titanium (Ti)	189		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Tungsten (W)	0.156		0.050	mg/kg	28-MAR-12	28-MAR-12	R2344069
Uranium (U)	0.603		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344069
Vanadium (V)	26.9		0.50	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zinc (Zn)	81		10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Zirconium (Zr)	3.58		0.10	mg/kg	28-MAR-12	28-MAR-12	R2344069
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
2-Methyl Naphthalene	0.014		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acenaphthene	0.0093		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acenaphthylene	0.0146		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Acridine	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Anthracene	0.0392		0.0040	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(a)anthracene	0.135		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(a)pyrene	0.118		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b)fluoranthene	0.177		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b&j)fluoranthene	0.196		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(g,h,i)perylene	0.134		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(k)fluoranthene	0.076		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Chrysene	0.117		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Dibenzo(a,h)anthracene	0.0243		0.0050	mg/kg	27-MAR-12	27-MAR-12	R2343677
Fluoranthene	0.205		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Fluorene	0.011		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Indeno(1,2,3-cd)pyrene	0.145		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Naphthalene	0.021		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Phenanthrene	0.145		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Pyrene	0.189		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
Quinoline	<0.010		0.010	mg/kg	27-MAR-12	27-MAR-12	R2343677
B(a)P Total Potency Equivalent	0.200		0.020	mg/kg	27-MAR-12	27-MAR-12	R2343677
IACR (CCME)	2.66		0.15	mg/kg	27-MAR-12	27-MAR-12	R2343677
Benzo(b+j+k)fluoranthene	0.272		0.014	mg/kg	27-MAR-12	27-MAR-12	R2343677
Surrogate: Acenaphthene d10	79.4		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Chrysene d12	70.9		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Naphthalene d8	79.5		50-150	%	27-MAR-12	27-MAR-12	R2343677
Surrogate: Phenanthrene d10	108.3		50-150	%	27-MAR-12	27-MAR-12	R2343677

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
B-HOTW-SK	Soil	Available Boron, Hot Water	SSSA (1996) P. 610-611

Hot water is used to extract the plant-available and potentially plant-available boron from soil. Boron in the extract is determined by ICP-OES.

BTEXS+F1-HSMS-WP	Soil	BTX by GCMS	EPA SW846 8260B REV 2

The soil methanol extract is added to water and reagents, then heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

ETL-OGG-CCME-WP	Soil	CCME Gravimetric Heavy Hydrocarbons (SG)	CCME CWS-PHC Dec-2000 - Pub# 1310-S
ETL-TEH-CCME-WP	Soil	CCME Total Extractable Hydrocarbons	CCME CWS-PHC Dec-2000 - Pub# 1310

A soil or sediment sample weight of ~10g is extracted with 1:1 hexane/acetone by either soxhlet or automated extraction procedures. Half the extract is used for gravimetric determination of heavy hydrocarbons and the other half is used for GC analysis. Both extracts are cleaned-up with silica gel to facilitate separation of the hydrocarbons from other polar extractables. An aliquot of the remaining solvent is analyzed using a gas chromatograph equipped with a flame-ionization detector.

ETL-TVH,TEH-CCME-WP	Soil	CCME Total Hydrocarbons	CCME CWS-PHC DEC-2000 - PUB# 1310-S

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

MET-200.2-MS-WP	Soil	Metals	EPA 200.8/200.2 /BCMOE-S

This analysis is carried out using procedures adapted from US EPA method 200.2. Sample preparation procedure for spectrochemical determination of total recoverable elements . Soil samples are dried (<60 C) and homogenized and a representative subsample of the dry material is digested. The digested samples are analyzed by ICPMS.

The results are reported as mg/Kg dry weight or mg/Kg wet weight this is equivalent to ug/g dry weight or ug/g wet weight.

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that maybe environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not mobile in the environment. This method has known stability issues for determining Silicon.

PAH,PANH-WP	Soil	Polyaromatic Hydrocarbons (PAHs)	EPA SW 846/8270-GC/MS

Samples are mix with sodium sulfate and extracted with acetone/dichloromethane using a combination of high frequency sonication and shake using a platform shaker. After extract concentration, samples are analyzed by GC/MS.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SK	ALS ENVIRONMENTAL - SASKATOON, SASKATCHEWAN, CANADA
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L1127827 Report Date: 02-APR-12

Client: KGS Group Consultants (Winnipeg)
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4
Contact: Rob Sinclair

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
B-HOTW-SK	**Soil**							
Batch R2345717								
WG1450524-1 DUP		**L1127827-7**						
Boron (B), Hot Water Ext.		1.59	1.58		mg/kg	0.67	30	02-APR-12
WG1450524-3 IRM		**SAL814**						
Boron (B), Hot Water Ext.			105.6		%		60-140	02-APR-12
WG1450524-2 MB								
Boron (B), Hot Water Ext.			<0.20		mg/kg		0.2	02-APR-12
BTEXS+F1-HSMS-WP	**Soil**							
Batch R2345709								
WG1450459-2 LCS								
Benzene			88.3		%		70-130	29-MAR-12
Toluene			86.8		%		70-130	29-MAR-12
Ethyl benzene			88.0		%		70-130	29-MAR-12
o-Xylene			87.5		%		70-130	29-MAR-12
m+p-Xylenes			87.2		%		70-130	29-MAR-12
WG1450459-1 MB								
Benzene			<0.0050		mg/kg		0.005	29-MAR-12
Toluene			<0.050		mg/kg		0.05	29-MAR-12
Ethyl benzene			<0.015		mg/kg		0.015	29-MAR-12
o-Xylene			<0.050		mg/kg		0.05	29-MAR-12
m+p-Xylenes			<0.050		mg/kg		0.05	29-MAR-12
Surrogate: 4-Bromofluorobenzene (SS)			87.0		%		70-130	29-MAR-12
ETL-TEH-CCME-WP	**Soil**							
Batch R2343587								
WG1448666-2 LCS								
F2 (C10-C16)			111.5		%		70-130	27-MAR-12
F3 (C16-C34)			108.6		%		70-130	27-MAR-12
F4 (C34-C50)			104.9		%		70-130	27-MAR-12
WG1448666-1 MB								
F2 (C10-C16)			<10		mg/kg		10	27-MAR-12
F3 (C16-C34)			<50		mg/kg		50	27-MAR-12
F4 (C34-C50)			<50		mg/kg		50	27-MAR-12
MET-200.2-MS-WP	**Soil**							
Batch R2344069								
WG1449662-2 CRM		**NRC PACS-2**						
Aluminum (Al)			96		%		70-130	28-MAR-12
Antimony (Sb)			114		%		70-130	28-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2344069								
WG1449662-2 CRM		**NRC PACS-2**						
Arsenic (As)			94		%		70-130	28-MAR-12
Barium (Ba)			78		%		70-130	28-MAR-12
Beryllium (Be)			83		%		70-130	28-MAR-12
Boron (B)			95		%		70-130	28-MAR-12
Cadmium (Cd)			95		%		70-130	28-MAR-12
Calcium (Ca)			95		%		70-130	28-MAR-12
Chromium (Cr)			105		%		70-130	28-MAR-12
Cobalt (Co)			91		%		70-130	28-MAR-12
Copper (Cu)			104		%		70-130	28-MAR-12
Iron (Fe)			100		%		70-130	28-MAR-12
Lead (Pb)			93		%		70-130	28-MAR-12
Magnesium (Mg)			98		%		70-130	28-MAR-12
Manganese (Mn)			94		%		70-130	28-MAR-12
Molybdenum (Mo)			109		%		70-130	28-MAR-12
Nickel (Ni)			99		%		70-130	28-MAR-12
Phosphorus (P)			106		%		70-130	28-MAR-12
Potassium (K)			91		%		70-130	28-MAR-12
Silver (Ag)			107		%		70-130	28-MAR-12
Sodium (Na)			102		%		70-130	28-MAR-12
Strontium (Sr)			94		%		70-130	28-MAR-12
Thallium (Tl)			87		%		70-130	28-MAR-12
Tin (Sn)			96		%		70-130	28-MAR-12
Titanium (Ti)			103		%		70-130	28-MAR-12
Uranium (U)			86		%		70-130	28-MAR-12
Vanadium (V)			99		%		70-130	28-MAR-12
Zinc (Zn)			90		%		70-130	28-MAR-12
WG1449662-3 CRM		**NRC MESS-3**						
Aluminum (Al)			72		%		70-130	28-MAR-12
Antimony (Sb)			85		%		70-130	28-MAR-12
Arsenic (As)			88		%		70-130	28-MAR-12
Barium (Ba)			95		%		70-130	28-MAR-12
Beryllium (Be)			75		%		70-130	28-MAR-12
Cadmium (Cd)			82		%		70-130	28-MAR-12
Calcium (Ca)			104		%		70-130	28-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2344069								
WG1449662-3 CRM		**NRC MESS-3**						
Chromium (Cr)			82		%		70-130	28-MAR-12
Cobalt (Co)			98		%		70-130	28-MAR-12
Copper (Cu)			104		%		70-130	28-MAR-12
Iron (Fe)			108		%		70-130	28-MAR-12
Lead (Pb)			86		%		70-130	28-MAR-12
Magnesium (Mg)			100		%		70-130	28-MAR-12
Manganese (Mn)			117		%		70-130	28-MAR-12
Molybdenum (Mo)			96		%		70-130	28-MAR-12
Nickel (Ni)			101		%		70-130	28-MAR-12
Phosphorus (P)			84		%		70-130	28-MAR-12
Potassium (K)			71		%		70-130	28-MAR-12
Selenium (Se)			111		%		70-130	28-MAR-12
Silver (Ag)			98		%		70-130	28-MAR-12
Sodium (Na)			104		%		70-130	28-MAR-12
Strontium (Sr)			94		%		70-130	28-MAR-12
Tin (Sn)			83		%		70-130	28-MAR-12
Uranium (U)			80		%		70-130	28-MAR-12
Vanadium (V)			74		%		70-130	28-MAR-12
Zinc (Zn)			95		%		70-130	28-MAR-12
WG1449662-1 MB								
Aluminum (Al)			<5.0		mg/kg		5	28-MAR-12
Antimony (Sb)			<0.10		mg/kg		0.1	28-MAR-12
Arsenic (As)			<0.10		mg/kg		0.1	28-MAR-12
Barium (Ba)			<0.50		mg/kg		0.5	28-MAR-12
Beryllium (Be)			<0.10		mg/kg		0.1	28-MAR-12
Bismuth (Bi)			<0.020		mg/kg		0.02	28-MAR-12
Boron (B)			<10		mg/kg		10	28-MAR-12
Cadmium (Cd)			<0.020		mg/kg		0.02	28-MAR-12
Calcium (Ca)			<100		mg/kg		100	28-MAR-12
Cesium (Cs)			<0.020		mg/kg		0.02	28-MAR-12
Chromium (Cr)			<1.0		mg/kg		1	28-MAR-12
Cobalt (Co)			<0.020		mg/kg		0.02	28-MAR-12
Copper (Cu)			<1.0		mg/kg		1	28-MAR-12
Iron (Fe)			<25		mg/kg		25	28-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2344069								
WG1449662-1 MB								
Lead (Pb)			<0.20		mg/kg		0.2	28-MAR-12
Magnesium (Mg)			<10		mg/kg		10	28-MAR-12
Manganese (Mn)			<0.50		mg/kg		0.5	28-MAR-12
Molybdenum (Mo)			<0.020		mg/kg		0.02	28-MAR-12
Nickel (Ni)			<0.50		mg/kg		0.5	28-MAR-12
Phosphorus (P)			<100		mg/kg		100	28-MAR-12
Potassium (K)			<25		mg/kg		25	28-MAR-12
Rubidium (Rb)			<0.020		mg/kg		0.02	28-MAR-12
Selenium (Se)			<0.50		mg/kg		0.5	28-MAR-12
Silver (Ag)			<0.10		mg/kg		0.1	28-MAR-12
Sodium (Na)			<10		mg/kg		10	28-MAR-12
Strontium (Sr)			<0.10		mg/kg		0.1	28-MAR-12
Tellurium (Te)			<0.10		mg/kg		0.1	28-MAR-12
Thallium (Tl)			<0.10		mg/kg		0.1	28-MAR-12
Tin (Sn)			<5.0		mg/kg		5	28-MAR-12
Titanium (Ti)			<0.50		mg/kg		0.5	28-MAR-12
Tungsten (W)			<0.050		mg/kg		0.05	28-MAR-12
Uranium (U)			<0.020		mg/kg		0.02	28-MAR-12
Vanadium (V)			<0.50		mg/kg		0.5	28-MAR-12
Zinc (Zn)			<10		mg/kg		10	28-MAR-12
Zirconium (Zr)			<0.10		mg/kg		0.1	28-MAR-12
PAH,PANH-WP	**Soil**							
Batch R2343677								
WG1449137-3 DUP		**L1127827-10**						
1-Methyl Naphthalene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	27-MAR-12
2-Methyl Naphthalene		0.014	0.010		mg/kg	26	50	27-MAR-12
Acenaphthene		0.0093	0.0079		mg/kg	17	50	27-MAR-12
Acenaphthylene		0.0146	0.0094		mg/kg	43	50	27-MAR-12
Acridine		<0.010	0.011	RPD-NA	mg/kg	N/A	50	27-MAR-12
Anthracene		0.0392	0.0344		mg/kg	13	50	27-MAR-12
Benzo(a)anthracene		0.135	0.098		mg/kg	32	50	27-MAR-12
Benzo(a)pyrene		0.118	0.081		mg/kg	37	50	27-MAR-12
Benzo(b)fluoranthene		0.177	0.150		mg/kg	16	50	27-MAR-12
Benzo(b&j)fluoranthene		0.196	0.146		mg/kg	29	50	27-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2343677								
WG1449137-3 DUP		**L1127827-10**						
Benzo(g,h,i)perylene		0.134	0.100		mg/kg	29	50	27-MAR-12
Benzo(k)fluoranthene		0.076	0.056		mg/kg	30	50	27-MAR-12
Chrysene		0.117	0.093		mg/kg	23	50	27-MAR-12
Dibenzo(a,h)anthracene		0.0243	0.0226		mg/kg	7.4	50	27-MAR-12
Fluoranthene		0.205	0.161		mg/kg	24	50	27-MAR-12
Fluorene		0.011	0.011		mg/kg	5.4	50	27-MAR-12
Indeno(1,2,3-cd)pyrene		0.145	0.108		mg/kg	30	50	27-MAR-12
Naphthalene		0.021	0.019		mg/kg	6.8	50	27-MAR-12
Phenanthrene		0.145	0.126		mg/kg	14	50	27-MAR-12
Pyrene		0.189	0.153		mg/kg	21	50	27-MAR-12
Quinoline		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	27-MAR-12
WG1449137-2 LCS								
1-Methyl Naphthalene			90.5		%		60-130	27-MAR-12
2-Methyl Naphthalene			83.6		%		60-130	27-MAR-12
Acenaphthene			100.9		%		60-130	27-MAR-12
Acenaphthylene			90.2		%		60-130	27-MAR-12
Acridine			118.2		%		60-130	27-MAR-12
Anthracene			111.6		%		60-130	27-MAR-12
Benzo(a)anthracene			77.7		%		60-130	27-MAR-12
Benzo(a)pyrene			90.4		%		60-130	27-MAR-12
Benzo(b)fluoranthene			94.8		%		60-130	27-MAR-12
Benzo(b&j)fluoranthene			95.0		%		60-130	27-MAR-12
Benzo(g,h,i)perylene			91.7		%		60-130	27-MAR-12
Benzo(k)fluoranthene			112.2		%		60-130	27-MAR-12
Chrysene			91.4		%		60-130	27-MAR-12
Dibenzo(a,h)anthracene			91.2		%		60-130	27-MAR-12
Fluoranthene			91.4		%		60-130	27-MAR-12
Fluorene			89.5		%		60-130	27-MAR-12
Indeno(1,2,3-cd)pyrene			84.5		%		60-130	27-MAR-12
Naphthalene			83.4		%		50-130	27-MAR-12
Phenanthrene			107.9		%		60-130	27-MAR-12
Pyrene			90.3		%		60-130	27-MAR-12
Quinoline			82.6		%		60-130	27-MAR-12
WG1449137-1 MB								
1-Methyl Naphthalene			<0.010		mg/kg		0.01	27-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2343677								
WG1449137-1 MB								
2-Methyl Naphthalene			<0.010		mg/kg		0.01	27-MAR-12
Acenaphthene			<0.0050		mg/kg		0.005	27-MAR-12
Acenaphthylene			<0.0050		mg/kg		0.005	27-MAR-12
Acridine			<0.010		mg/kg		0.01	27-MAR-12
Anthracene			<0.0040		mg/kg		0.004	27-MAR-12
Benzo(a)anthracene			<0.010		mg/kg		0.01	27-MAR-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	27-MAR-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	27-MAR-12
Benzo(b&j)fluoranthene			<0.010		mg/kg		0.01	27-MAR-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	27-MAR-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	27-MAR-12
Chrysene			<0.010		mg/kg		0.01	27-MAR-12
Dibenzo(a,h)anthracene			<0.0050		mg/kg		0.005	27-MAR-12
Fluoranthene			<0.010		mg/kg		0.01	27-MAR-12
Fluorene			<0.010		mg/kg		0.01	27-MAR-12
Indeno(1,2,3-cd)pyrene			<0.010		mg/kg		0.01	27-MAR-12
Naphthalene			<0.010		mg/kg		0.01	27-MAR-12
Phenanthrene			<0.010		mg/kg		0.01	27-MAR-12
Pyrene			<0.010		mg/kg		0.01	27-MAR-12
Quinoline			<0.010		mg/kg		0.01	27-MAR-12
Surrogate: Acenaphthene d10			69.9		%		50-150	27-MAR-12
Surrogate: Chrysene d12			61.6		%		50-150	27-MAR-12
Surrogate: Naphthalene d8			69.2		%		50-150	27-MAR-12
Surrogate: Phenanthrene d10			114.2		%		50-150	27-MAR-12

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

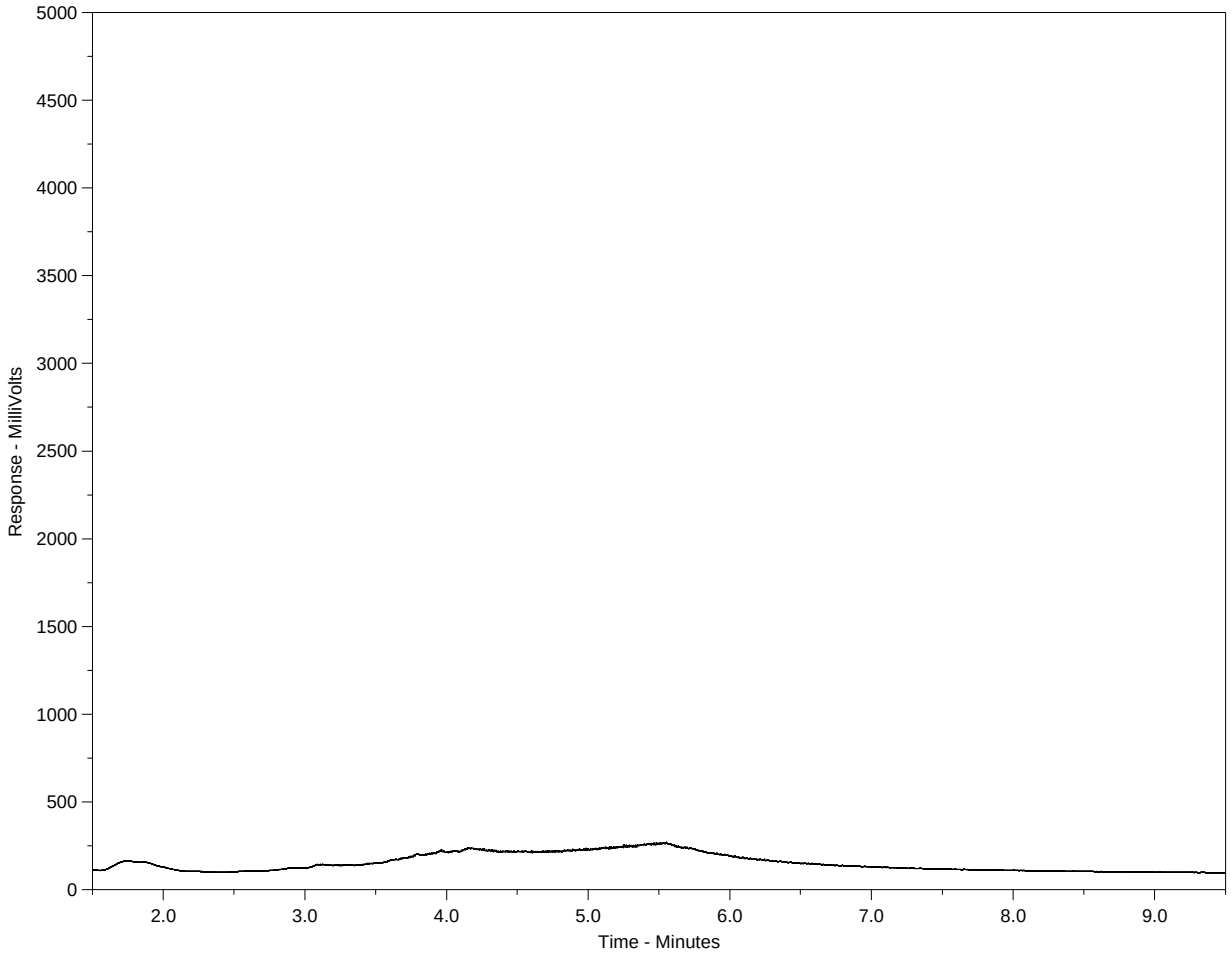
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Hydrocarbon Distribution Report

ALS Sample ID: **L1127827-9**
Client ID: **REDONDA COMPOSITE S6/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

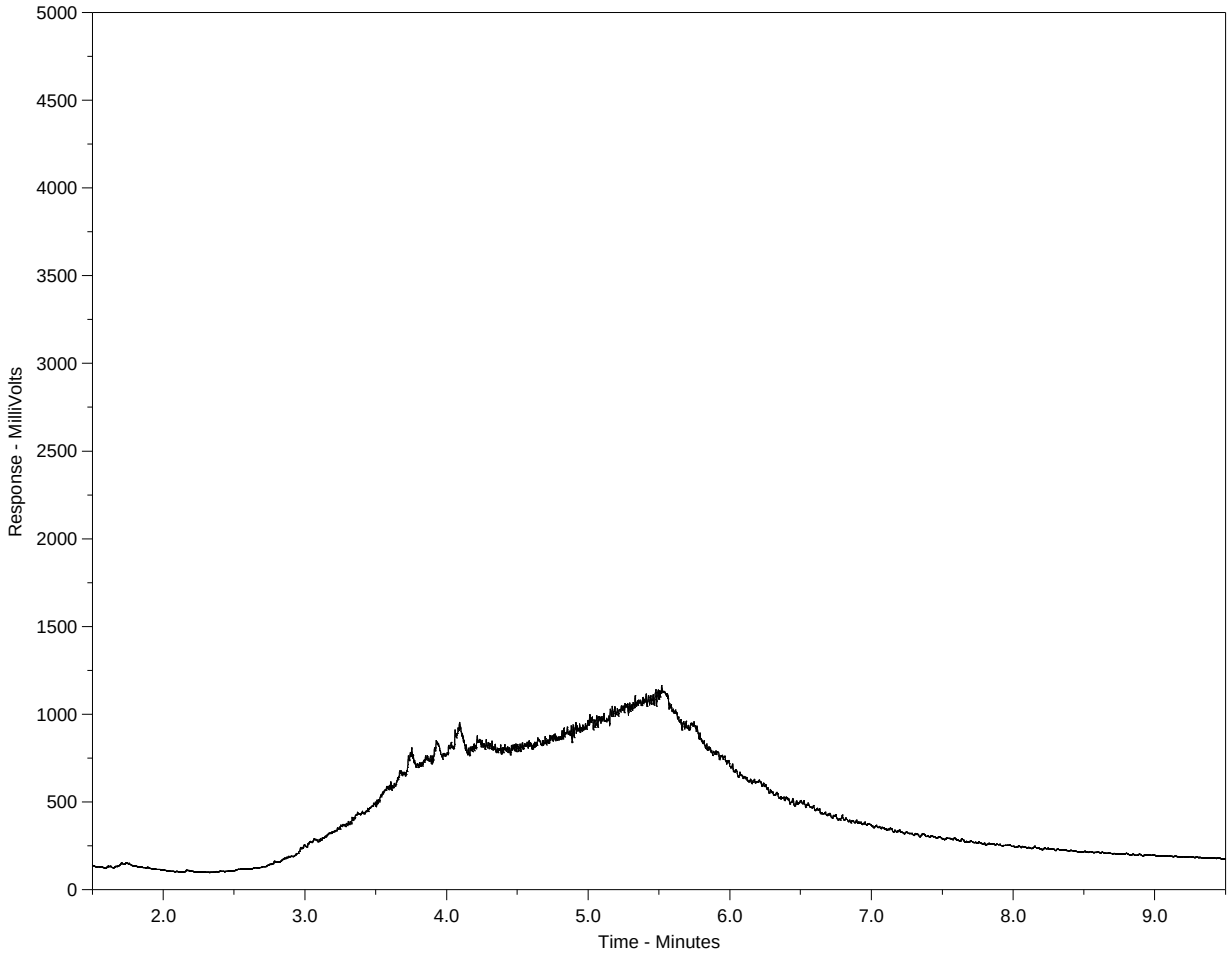
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1127827-10**
Client ID: **REDONDA COMPOSITE S1/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

L1127827-COFC

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a Toll Free: 1 800 668 9878
www.alsglobal.com

L1127827

10-023322

Page 1 of 1

Report To		Report Format / Distribution		Service Requested: (Rush subject to availability)	
Company:	KGS Grup	Standard: X Other (specify):			Regular (Standard Turnaround Times))
Contact:	Rob Sinclair	Select: PDF X Excel X Digital Fax			Priority, Date Req'd: (Surcharges apply)
Address:	865 Waverley Street	Email 1:	RSinclair@KGSGrup.com	X	Emergency (1 Business Day) - 100% Surcharge
		Email 2:	Anderson@KGSGrup.com		For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	896-1009 Fax: 896-0754			Analysis Request	
Invoice To	Same as Report ? (circle) Yes or No (if No, provide details)	**Client / Project Information**		(Indicate Filtered or Preserved, F/P)	
	Copy of Invoice with Report? (circle) Yes or No	Job #:	Redonda Landfill		
Company:	KGS Grup	PO / AFE:			
Contact:	Bill MacGurrie	LSD:			
Address:	865 Waverley St				
Phone:	896-1009 Fax: 896-0754	Quote #:			
Lab Work Order # (lab use only)		**ALS Contact:**	**Sampler:**		

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	BTEX	F1 - F4	METALS	PAH	Number of Containers
	Redonda Composite S1	Mar 26	1600	Bag			X		
	Redonda Composite S2		1600				X		
	Redonda Composite S3		1615				X		
	Redonda Composite S4		1615				X		
	Redonda Composite S5		1620				X		
	Redonda Composite S6		1620				X		
	TP1-S1		1300				X		
	TP2-S2		1330				X		
	Redonda Composite S6		1620	Jar	X	X	X	X	
	Redonda Composite S1		1600	Jar	X	X	X	X	

Special Instructions / Regulations / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				26 MAR	16:45	14 °C				

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION | WHITE - LABORATORY COPY | YELLOW - CLIENT COPY | GENF 18.01 Front

KGS Group Consultants (Winnipeg)
ATTN: Rob Sinclair
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4

Date Received: 27-MAR-12
Report Date: 02-APR-12 15:50 (MT)
Version: FINAL

Client Phone: 204-896-1209

Certificate of Analysis

Lab Work Order #: L1128263

Project P.O. #: NOT SUBMITTED
Job Reference: ELMWOOD / NARN LANDFILL
C of C Numbers:
Legal Site Desc:

Paul Nicolas
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-1 TP3 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 08:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	0.98		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	12300		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.74		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.06		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	218		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.46		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.124		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	24		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.185		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	96000		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.832		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	24.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	6.52		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	25.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	18200		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	60.5		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	41900		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	342		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.595		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	19.9		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	550		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	2860		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	18.8		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.13		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	469		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	118		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	42.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	306		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.153		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.772		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	38.3		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	93		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	4.64		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-2 TP4 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 08:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	0.76		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	16700		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.24		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.40		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	104		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.64		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.149		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	18		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.134		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-2 TP4 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 08:50							
Matrix: SOIL							
Metals							
Calcium (Ca)	77400		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.37		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	33.0		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	9.32		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	22.3		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	21500		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	7.95		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	46100		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	404		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.395		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	27.3		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	430		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3530		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	28.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	1170		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	55.4		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.20		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	7.5		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	357		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.920		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	56.9		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	49		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	12.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-3 TP5 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 09:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	2.31		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	15700		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	5.49		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	14.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	241		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.59		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.401		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	18		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	<0.020		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	61200		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.00		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	36.7		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	10.9		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	62.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	58900		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	602		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	24800		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	550		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	1.18		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-3 TP5 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 09:10							
Matrix: SOIL							
Metals							
Nickel (Ni)	31.9		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	960		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3390		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	26.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.31		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	760		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	83.4		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.20		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	633		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	247		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.158		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.944		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	48.5		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	833		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	11.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-4 TP6 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 09:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	4.53		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	18200		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	1.26		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.92		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	192		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.74		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.188		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	23		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.366		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	53100		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.993		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	34.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	10.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	35.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	24500		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	86.0		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	24700		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	677		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.822		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	33.5		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	560		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3710		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	27.4		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	0.54		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.17		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	621		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	89.9		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-4 TP6 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 09:30							
Matrix: SOIL							
Metals							
Tin (Sn)	6.3		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	185		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.055		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.03		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	58.3		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	93		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	8.67		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-5 TP7 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 09:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.38		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	20200		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.50		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.79		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	180		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.84		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.198		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	16		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.217		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	58200		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.35		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	41.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	11.8		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	31.3		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	26200		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	30.6		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	28900		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	601		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.714		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	38.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	560		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4680		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	35.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.15		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	487		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	82.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.26		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	353		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.051		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.11		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	61.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	79		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	9.67		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-6 TP8 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:10							
Matrix: SOIL							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-6 TP8 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	2.39		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	13500		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.99		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.36		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	312		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.62		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.175		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	23		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.340		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	71700		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.857		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	26.6		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	8.31		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	31.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	20800		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	93.1		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	28200		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	679		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.852		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	29.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	520		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	2720		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	21.2		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.19		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	534		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	120		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.18		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	244		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.102		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.839		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	43.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	155		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	7.54		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-7 TP9 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.57		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	16800		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	1.07		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.72		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	186		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.68		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.177		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	15		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.226		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-7 TP9 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:30							
Matrix: SOIL							
Metals							
Calcium (Ca)	59900		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.24		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	35.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	10.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	27.6		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	22600		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	57.6		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	28200		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	440		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.532		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	31.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	510		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3690		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	30.0		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.16		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	510		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	87.9		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	5.4		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	302		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.060		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.14		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	50.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	76		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	10.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-8 TP10 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	0.73		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	9570		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.28		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	3.26		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	84.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.41		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.094		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	12		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.158		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	97700		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.788		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	21.6		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	5.93		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	16.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	15100		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	16.8		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	46600		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	462		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.287		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-8 TP10 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 10:50							
Matrix: SOIL							
Metals							
Nickel (Ni)	19.1		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	430		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	2590		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	16.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	599		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	66.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	310		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.894		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	32.4		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	37		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	10.2		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-9 TP11 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 11:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.57		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	15900		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.39		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.15		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	137		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.59		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.145		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	20		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.265		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	83300		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.945		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	31.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	7.97		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	23.3		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	19700		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	75.4		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	36600		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	363		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.450		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	26.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	510		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3810		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	25.3		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.13		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	492		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	103		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.17		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-9 TP11 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 11:10							
Matrix: SOIL							
Metals							
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	287		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.135		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.13		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	49.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	75		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	7.45		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-10 TP12 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 11:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.54		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	23700		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.33		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	6.11		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	173		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.86		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.253		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	20		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.265		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	44000		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.58		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	44.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	12.9		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	29.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	27600		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	16.8		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	23200		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	592		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.678		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	39.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	540		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4670		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	38.2		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.38		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	417		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	71.4		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.26		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	236		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.054		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.28		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	70.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	79		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	9.78		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-11 TP13 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 11:50							
Matrix: SOIL							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-11 TP13 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 11:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	4.18		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	15300		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.25		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.55		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	142		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.57		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.134		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	20		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.187		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	76600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.15		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	30.7		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	9.08		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	23.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	20700		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	15.2		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	38000		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	403		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.446		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	28.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	570		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3540		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	26.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	536		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	93.8		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.19		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	325		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.055		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.06		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	51.7		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	51		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	7.38		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-12 TP14 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.83		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	19300		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.56		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.40		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	192		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.72		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.185		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	18		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.224		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-12 TP14 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:10							
Matrix: SOIL							
Metals							
Calcium (Ca)	66600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.24		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	35.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	12.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	27.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	24300		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	40.4		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	26800		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	464		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.729		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	32.7		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	450		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4090		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	31.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.16		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	253		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	120		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	13.3		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	183		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.00		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	58.3		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	79		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	11.5		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-13 TP15 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.69		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	17800		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.34		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.56		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	155		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.82		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.187		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	17		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.215		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	63900		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.33		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	34.5		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	11.3		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	25.3		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	24100		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	20.8		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	29300		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	492		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.781		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-13 TP15 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:30							
Matrix: SOIL							
Metals							
Nickel (Ni)	31.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	460		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3490		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	29.9		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	457		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	81.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	195		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.08		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	56.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	67		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	11.4		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-14 TP16 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	7.91		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	14200		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.78		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.52		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	198		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.56		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.202		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	27		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	1.00		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	66500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.974		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	30.1		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	8.21		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	33.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	27400		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	127		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	27600		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	375		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	1.40		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	34.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3090		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	24.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	878		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	111		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.17		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-14 TP16 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 12:50							
Matrix: SOIL							
Metals							
Tin (Sn)	14.4		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	162		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.070		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.04		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	43.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	108		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	9.39		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-15 TP17 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 13:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	4.35		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	19200		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.93		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.84		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	205		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.83		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.181		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	20		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.600		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	49700		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.13		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	37.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	11.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	37.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	24500		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	101		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	24400		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	377		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.588		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	34.1		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	450		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4300		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	31.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	433		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	128		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.21		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	5.7		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	163		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.088		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.866		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	58.1		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	114		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	10.7		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-16 TP18 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 13:30							
Matrix: SOIL							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-16 TP18 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 13:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	7.19		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	21600		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	1.65		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	8.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	334		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.98		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.219		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	33		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.643		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	56700		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.21		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	39.5		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	12.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	41.0		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	35400		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	141		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	24400		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	476		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	1.88		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	41.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4130		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	32.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	0.63		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.30		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	983		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	175		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.24		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	22.2		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	192		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.069		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.30		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	60.9		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	388		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	14.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-17 TP19 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 13:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	6.90		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	21600		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.71		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	7.51		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	180		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.87		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.202		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	33		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.358		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-17 TP19 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 13:50							
Matrix: SOIL							
Metals							
Calcium (Ca)	66100		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.34		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	38.6		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	12.1		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	40.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	26700		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	53.1		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	31400		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	516		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.876		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	36.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4230		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	34.2		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	0.51		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.19		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	853		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	129		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.23		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	5.1		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	189		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.18		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	64.4		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	92		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	13.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-18 TP20 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 14:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.03		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	19700		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.28		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.21		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	143		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.69		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.160		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	14		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.203		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	66100		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.24		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	36.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	10.4		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	24.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	24300		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	15.5		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	27400		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	421		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.495		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-18 TP20 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 14:10							
Matrix: SOIL							
Metals							
Nickel (Ni)	29.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	480		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3880		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	30.5		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.13		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	294		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	81.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	217		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.054		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.951		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	57.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	63		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	10.4		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-19 TP21 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 14:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	0.90		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	13800		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.24		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	3.83		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	113		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.46		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.134		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	14		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.170		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	82600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.10		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	28.3		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	8.38		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	18.8		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	18200		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	10.3		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	44100		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	434		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.483		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	24.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	470		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	2810		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	23.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	665		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	78.9		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.17		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-19 TP21 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 14:30							
Matrix: SOIL							
Metals							
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	283		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.057		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.21		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	42.7		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	44		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	8.00		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-20 TP22 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 14:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.19		0.20	mg/kg	02-APR-12	02-APR-12	R2345727
Metals							
Aluminum (Al)	21300		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.33		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	6.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	200		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.90		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.200		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	16		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.248		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	43600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.44		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	41.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	13.4		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	28.6		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	28400		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	14.7		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	23200		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	559		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.705		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	38.2		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	510		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4380		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	38.2		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	0.55		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.17		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	501		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	74.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.26		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	198		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.19		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	65.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	74		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	12.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-21 TP23 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:10							
Matrix: SOIL							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-21 TP23 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.06		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	15500		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.35		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.87		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	126		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.60		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.138		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	14		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.309		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	73000		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.10		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	30.8		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	9.30		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	25.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	20500		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	27.3		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	32500		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	378		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.655		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	28.3		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3390		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	26.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.15		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	457		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	75.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.19		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	249		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.062		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.975		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	49.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	62		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	8.32		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-22 TP24 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:30							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	2.92		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	26300		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.36		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.58		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	220		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.99		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.172		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	23		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.179		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-22 TP24 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:30							
Matrix: SOIL							
Metals							
Calcium (Ca)	58700		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.45		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	44.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	11.6		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	28.5		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	27100		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	27.5		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	26600		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	489		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.437		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	35.1		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	490		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4890		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	36.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.15		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	638		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	113		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.24		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	304		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.070		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.862		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	69.7		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	86		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	8.79		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-23 TP25 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:50							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.45		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	17700		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.36		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.93		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	139		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.69		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.150		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	16		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.205		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	63600		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.33		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	36.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	10.6		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	27.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	23800		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	16.4		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	33800		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	429		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.614		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-23 TP25 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 15:50							
Matrix: SOIL							
Metals							
Nickel (Ni)	31.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	520		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	4160		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	32.2		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	943		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	77.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.22		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	420		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.10		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	54.8		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	72		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	11.6		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-24 TP26 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.29		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	11800		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.30		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	3.70		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	114		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.54		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.114		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	15		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.204		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	81800		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	0.885		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	23.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	6.94		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	29.9		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	16800		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	24.6		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	42500		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	375		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.359		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	21.9		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	2980		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	21.0		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	392		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	87.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.16		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-24 TP26 S3							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Metals							
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	274		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	0.054		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.814		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	38.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	56		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	5.45		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-25 TP15 S2/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	85.4		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	12		10	mg/kg		29-MAR-12	
F2-Naphth	12		10	mg/kg		29-MAR-12	
F3 (C16-C34)	86		50	mg/kg		29-MAR-12	
F3-PAH	86		50	mg/kg		29-MAR-12	
F4 (C34-C50)	67		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	165		50	mg/kg		29-MAR-12	
Miscellaneous Parameters							
% Moisture	19		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Anthracene	<0.0040		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	0.013		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b&j)fluoranthene	0.012		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	0.019		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-25 TP15 S2/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Naphthalene	0.011		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	0.011		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	0.014		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	<0.020		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	0.16		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	<0.014		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	89.4		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	87.9		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	81.0		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	88.7		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-26 TP9 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	85.3		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	<10		10	mg/kg		29-MAR-12	
F2-Naphth	<10		10	mg/kg		29-MAR-12	
F3 (C16-C34)	<50		50	mg/kg		29-MAR-12	
F3-PAH	<50		50	mg/kg		29-MAR-12	
F4 (C34-C50)	52		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	52		50	mg/kg		29-MAR-12	
Miscellaneous Parameters							
% Moisture	21		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Anthracene	<0.0040		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	0.014		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b&j)fluoranthene	0.013		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-26 TP9 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	0.019		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Naphthalene	0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	0.011		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	0.015		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	<0.020		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	0.18		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	<0.014		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	85.4		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	81.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	78.5		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	86.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-27 TP26 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	83.9		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	13		10	mg/kg		29-MAR-12	
F2-Naphth	13		10	mg/kg		29-MAR-12	
F3 (C16-C34)	78		50	mg/kg		29-MAR-12	
F3-PAH	78		50	mg/kg		29-MAR-12	
F4 (C34-C50)	83		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	174		50	mg/kg		29-MAR-12	
Miscellaneous Parameters							
% Moisture	16		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Anthracene	<0.0040		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-27 TP26 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Benzo(b&j)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	0.020		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	0.011		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	0.013		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	0.015		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	<0.020		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	<0.15		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	<0.014		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	90.7		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	86.2		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	74.6		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	91.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-28 TP21 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	87.2		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	15		10	mg/kg		29-MAR-12	
F2-Naphth	15		10	mg/kg		29-MAR-12	
F3 (C16-C34)	<50		50	mg/kg		29-MAR-12	
F3-PAH	<50		50	mg/kg		29-MAR-12	
F4 (C34-C50)	<50		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg		29-MAR-12	
Miscellaneous Parameters							
% Moisture	27		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-28 TP21 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Anthracene	<0.0040		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b&j)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	<0.020		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	<0.15		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	<0.014		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	86.5		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	81.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	69.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	85.3		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-29 TP3 S2/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	81.2		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	12		10	mg/kg		29-MAR-12	
F2-Naphth	12		10	mg/kg		29-MAR-12	
F3 (C16-C34)	105		50	mg/kg		29-MAR-12	
F3-PAH	105		50	mg/kg		29-MAR-12	
F4 (C34-C50)	182		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	299		50	mg/kg		29-MAR-12	
Miscellaneous Parameters							
% Moisture	18		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-29 TP3 S2/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Anthracene	0.0096		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	0.032		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	0.035		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	0.055		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b&j)fluoranthene	0.053		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	0.031		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	0.018		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	0.037		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Dibenzo(a,h)anthracene	0.0052		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	0.066		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	0.025		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Naphthalene	0.015		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	0.039		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	0.058		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	0.054		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	0.70		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	0.071		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	85.6		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	87.1		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	56.2		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	80.1		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-30 TP5 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Toluene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Ethyl benzene	<0.015		0.015	mg/kg	28-MAR-12	29-MAR-12	R2343761
o-Xylene	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
m+p-Xylenes	<0.050		0.050	mg/kg	28-MAR-12	29-MAR-12	R2343761
Xylenes	<0.10		0.10	mg/kg	28-MAR-12	29-MAR-12	R2343761
Surrogate: 4-Bromofluorobenzene (SS)	79.8		70-130	%	28-MAR-12	29-MAR-12	R2343761
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				28-MAR-12	28-MAR-12	R2343987
Prep/Analysis Dates					28-MAR-12	28-MAR-12	R2343987
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		29-MAR-12	
F1-BTEX	<10		10	mg/kg		29-MAR-12	
F2 (C10-C16)	18		10	mg/kg		29-MAR-12	
F2-Naphth	18		10	mg/kg		29-MAR-12	
F3 (C16-C34)	82		50	mg/kg		29-MAR-12	
F3-PAH	82		50	mg/kg		29-MAR-12	
F4 (C34-C50)	94		50	mg/kg		29-MAR-12	
Total Hydrocarbons (C6-C50)	194		50	mg/kg		29-MAR-12	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-30 TP5 S3/JAR							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Miscellaneous Parameters							
% Moisture	31		0.10	%	28-MAR-12	28-MAR-12	R2343929
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
2-Methyl Naphthalene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acenaphthylene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Acridine	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Anthracene	0.0081		0.0040	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)anthracene	0.028		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(a)pyrene	0.035		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b)fluoranthene	0.053		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b&j)fluoranthene	0.049		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(g,h,i)perylene	0.020		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(k)fluoranthene	0.018		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Chrysene	0.033		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluoranthene	0.051		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Fluorene	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Indeno(1,2,3-cd)pyrene	0.024		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Naphthalene	0.013		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Phenanthrene	0.032		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Pyrene	0.050		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
Quinoline	<0.010		0.010	mg/kg	28-MAR-12	28-MAR-12	R2344518
B(a)P Total Potency Equivalent	0.050		0.020	mg/kg	28-MAR-12	28-MAR-12	R2344518
IACR (CCME)	0.66		0.15	mg/kg	28-MAR-12	28-MAR-12	R2344518
Benzo(b+j+k)fluoranthene	0.067		0.014	mg/kg	28-MAR-12	28-MAR-12	R2344518
Surrogate: Acenaphthene d10	83.2		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Chrysene d12	74.1		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Naphthalene d8	72.9		50-150	%	28-MAR-12	28-MAR-12	R2344518
Surrogate: Phenanthrene d10	86.8		50-150	%	28-MAR-12	28-MAR-12	R2344518
L1128263-31 TP101 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	4.44		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	17500		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.35		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	5.32		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	176		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.85		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.185		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	19		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.298		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	50300		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.05		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	33.2		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	11.9		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	26.4		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	23800		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	27.8		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-31 TP101 S1							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Metals							
Magnesium (Mg)	23000		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	893		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.872		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	34.4		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	560		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3710		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	30.7		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.14		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	571		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Strontium (Sr)	75.0		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.23		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	<5.0		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	142		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	1.04		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	61.0		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	81		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	9.00		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
L1128263-32 TP102 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Miscellaneous Parameters							
Boron (B), Hot Water Ext.	1.23		0.20	mg/kg	02-APR-12	02-APR-12	R2345717
Metals							
Aluminum (Al)	16400		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Antimony (Sb)	0.44		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Arsenic (As)	4.73		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Barium (Ba)	133		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Beryllium (Be)	0.68		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Bismuth (Bi)	0.145		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Boron (B)	14		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cadmium (Cd)	0.270		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Calcium (Ca)	68500		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cesium (Cs)	1.02		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Chromium (Cr)	31.7		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Cobalt (Co)	9.34		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Copper (Cu)	26.0		1.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Iron (Fe)	21400		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Lead (Pb)	37.4		0.20	mg/kg	29-MAR-12	29-MAR-12	R2344643
Magnesium (Mg)	32000		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Manganese (Mn)	377		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Molybdenum (Mo)	0.454		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Nickel (Ni)	28.6		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Phosphorus (P)	470		100	mg/kg	29-MAR-12	29-MAR-12	R2344643
Potassium (K)	3640		25	mg/kg	29-MAR-12	29-MAR-12	R2344643
Rubidium (Rb)	27.4		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Selenium (Se)	<0.50		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Silver (Ag)	0.13		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Sodium (Na)	533		10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128263-32 TP102 S2							
Sampled By: ADS/JHL on 27-MAR-12 @ 16:10							
Matrix: SOIL							
Metals							
Strontium (Sr)	74.3		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tellurium (Te)	<0.10		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Thallium (Tl)	0.19		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tin (Sn)	5.5		5.0	mg/kg	29-MAR-12	29-MAR-12	R2344643
Titanium (Ti)	195		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Tungsten (W)	<0.050		0.050	mg/kg	29-MAR-12	29-MAR-12	R2344643
Uranium (U)	0.977		0.020	mg/kg	29-MAR-12	29-MAR-12	R2344643
Vanadium (V)	50.1		0.50	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zinc (Zn)	65		10	mg/kg	29-MAR-12	29-MAR-12	R2344643
Zirconium (Zr)	9.42		0.10	mg/kg	29-MAR-12	29-MAR-12	R2344643

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
B-HOTW-SK	Soil	Available Boron, Hot Water	SSSA (1996) P. 610-611

Hot water is used to extract the plant-available and potentially plant-available boron from soil. Boron in the extract is determined by ICP-OES.

BTEXS+F1-HSMS-WP	Soil	BTX by GCMS	EPA SW846 8260B REV 2

The soil methanol extract is added to water and reagents, then heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

ETL-TEH-CCME-WP	Soil	CCME Total Extractable Hydrocarbons	CCME CWS-PHC Dec-2000 - Pub# 1310

A soil or sediment sample weight of ~10g is extracted with 1:1 hexane/acetone by either soxhlet or automated extraction procedures. Half the extract is used for gravimetric determination of heavy hydrocarbons and the other half is used for GC analysis. Both extracts are cleaned-up with silica gel to facilitate separation of the hydrocarbons from other polar extractables. An aliquot of the remaining solvent is analyzed using a gas chromatograph equipped with a flame-ionization detector.

ETL-TVH,TEH-CCME-WP	Soil	CCME Total Hydrocarbons	CCME CWS-PHC DEC-2000 - PUB# 1310-S

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

MET-200.2-MS-WP	Soil	Metals	EPA 200.8/200.2 /BCMOE-S

This analysis is carried out using procedures adapted from US EPA method 200.2. Sample preparation procedure for spectrochemical determination of total recoverable elements . Soil samples are dried (<60 C) and homogenized and a representative subsample of the dry material is digested. The digested samples are analyzed by ICPMS.

The results are reported as mg/Kg dry weight or mg/Kg wet weight this is equivalent to ug/g dry weight or ug/g wet weight.

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that maybe environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not mobile in the environment. This method has known stability issues for determining Silicon.

PAH,PANH-WP	Soil	Polyaromatic Hydrocarbons (PAHs)	EPA SW 846/8270-GC/MS

Samples are mix with sodium sulfate and extracted with acetone/dichloromethane using a combination of high frequency sonication and shake using a platform shaker. After extract concentration, samples are analyzed by GC/MS.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SK	ALS ENVIRONMENTAL - SASKATOON, SASKATCHEWAN, CANADA
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

Chain of Custody Numbers:

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: KGS Group Consultants (Winnipeg)
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4
Contact: Rob Sinclair

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
B-HOTW-SK	**Soil**							
Batch R2345717								
WG1450524-3 IRM		**SAL814**						
Boron (B), Hot Water Ext.			105.6		%		60-140	02-APR-12
WG1450524-2 MB								
Boron (B), Hot Water Ext.			<0.20		mg/kg		0.2	02-APR-12
Batch R2345727								
WG1450518-1 DUP		**L1128263-13**						
Boron (B), Hot Water Ext.		1.69	1.56		mg/kg	7.9	30	02-APR-12
WG1450518-3 IRM		**SAL814**						
Boron (B), Hot Water Ext.			97.0		%		60-140	02-APR-12
WG1450518-2 MB								
Boron (B), Hot Water Ext.			<0.20		mg/kg		0.2	02-APR-12
BTEXS+F1-HSMS-WP	**Soil**							
Batch R2343761								
WG1449515-2 LCS								
Benzene			89.0		%		70-130	28-MAR-12
Toluene			93.2		%		70-130	28-MAR-12
Ethyl benzene			83.1		%		70-130	28-MAR-12
o-Xylene			84.3		%		70-130	28-MAR-12
m+p-Xylenes			86.4		%		70-130	28-MAR-12
WG1449515-1 MB								
Benzene			<0.0050		mg/kg		0.005	28-MAR-12
Toluene			<0.050		mg/kg		0.05	28-MAR-12
Ethyl benzene			<0.015		mg/kg		0.015	28-MAR-12
o-Xylene			<0.050		mg/kg		0.05	28-MAR-12
m+p-Xylenes			<0.050		mg/kg		0.05	28-MAR-12
Surrogate: 4-Bromofluorobenzene (SS)			83.4		%		70-130	28-MAR-12
ETL-TEH-CCME-WP	**Soil**							
Batch R2343987								
WG1449449-2 LCS								
F2 (C10-C16)			101.7		%		70-130	28-MAR-12
F3 (C16-C34)			107.8		%		70-130	28-MAR-12
F4 (C34-C50)			103.3		%		70-130	28-MAR-12
WG1449449-3 LCS								
F2 (C10-C16)			109.4		%		70-130	28-MAR-12
F3 (C16-C34)			114.8		%		70-130	28-MAR-12
F4 (C34-C50)			113.7		%		70-130	28-MAR-12
WG1449449-1 MB								

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ETL-TEH-CCME-WP	**Soil**							
Batch R2343987								
WG1449449-1 MB								
F2 (C10-C16)			<10		mg/kg		10	28-MAR-12
F3 (C16-C34)			<50		mg/kg		50	28-MAR-12
F4 (C34-C50)			<50		mg/kg		50	28-MAR-12
MET-200.2-MS-WP	**Soil**							
Batch R2344643								
WG1450254-2 CRM		**NRC PACS-2**						
Aluminum (Al)			99		%		70-130	29-MAR-12
Antimony (Sb)			123		%		70-130	29-MAR-12
Arsenic (As)			97		%		70-130	29-MAR-12
Barium (Ba)			92		%		70-130	29-MAR-12
Beryllium (Be)			82		%		70-130	29-MAR-12
Boron (B)			93		%		70-130	29-MAR-12
Cadmium (Cd)			96		%		70-130	29-MAR-12
Calcium (Ca)			103		%		70-130	29-MAR-12
Chromium (Cr)			106		%		70-130	29-MAR-12
Cobalt (Co)			97		%		70-130	29-MAR-12
Copper (Cu)			101		%		70-130	29-MAR-12
Iron (Fe)			101		%		70-130	29-MAR-12
Lead (Pb)			100		%		70-130	29-MAR-12
Magnesium (Mg)			98		%		70-130	29-MAR-12
Manganese (Mn)			106		%		70-130	29-MAR-12
Molybdenum (Mo)			105		%		70-130	29-MAR-12
Nickel (Ni)			96		%		70-130	29-MAR-12
Phosphorus (P)			93		%		70-130	29-MAR-12
Potassium (K)			97		%		70-130	29-MAR-12
Silver (Ag)			98		%		70-130	29-MAR-12
Sodium (Na)			97		%		70-130	29-MAR-12
Strontium (Sr)			106		%		70-130	29-MAR-12
Thallium (Tl)			96		%		70-130	29-MAR-12
Tin (Sn)			100		%		70-130	29-MAR-12
Titanium (Ti)			113		%		70-130	29-MAR-12
Uranium (U)			91		%		70-130	29-MAR-12
Vanadium (V)			105		%		70-130	29-MAR-12
Zinc (Zn)			98		%		70-130	29-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2344643								
WG1450254-3 CRM		**NRC MESS-3**						
Aluminum (Al)			83		%		70-130	29-MAR-12
Antimony (Sb)			102		%		70-130	29-MAR-12
Arsenic (As)			93		%		70-130	29-MAR-12
Barium (Ba)			109		%		70-130	29-MAR-12
Beryllium (Be)			86		%		70-130	29-MAR-12
Cadmium (Cd)			85		%		70-130	29-MAR-12
Calcium (Ca)			111		%		70-130	29-MAR-12
Chromium (Cr)			93		%		70-130	29-MAR-12
Cobalt (Co)			105		%		70-130	29-MAR-12
Copper (Cu)			104		%		70-130	29-MAR-12
Iron (Fe)			114		%		70-130	29-MAR-12
Lead (Pb)			95		%		70-130	29-MAR-12
Magnesium (Mg)			101		%		70-130	29-MAR-12
Manganese (Mn)			128		%		70-130	29-MAR-12
Molybdenum (Mo)			96		%		70-130	29-MAR-12
Nickel (Ni)			106		%		70-130	29-MAR-12
Phosphorus (P)			93		%		70-130	29-MAR-12
Potassium (K)			81		%		70-130	29-MAR-12
Silver (Ag)			98		%		70-130	29-MAR-12
Sodium (Na)			110		%		70-130	29-MAR-12
Strontium (Sr)			104		%		70-130	29-MAR-12
Tin (Sn)			93		%		70-130	29-MAR-12
Uranium (U)			91		%		70-130	29-MAR-12
Vanadium (V)			83		%		70-130	29-MAR-12
Zinc (Zn)			99		%		70-130	29-MAR-12
WG1450254-1 MB								
Aluminum (Al)			<5.0		mg/kg		5	29-MAR-12
Antimony (Sb)			<0.10		mg/kg		0.1	29-MAR-12
Arsenic (As)			<0.10		mg/kg		0.1	29-MAR-12
Barium (Ba)			<0.50		mg/kg		0.5	29-MAR-12
Beryllium (Be)			<0.10		mg/kg		0.1	29-MAR-12
Bismuth (Bi)			<0.020		mg/kg		0.02	29-MAR-12
Boron (B)			<10		mg/kg		10	29-MAR-12
Cadmium (Cd)			<0.020		mg/kg		0.02	29-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2344643								
WG1450254-1 MB								
Calcium (Ca)			<100		mg/kg		100	29-MAR-12
Cesium (Cs)			<0.020		mg/kg		0.02	29-MAR-12
Chromium (Cr)			<1.0		mg/kg		1	29-MAR-12
Cobalt (Co)			<0.020		mg/kg		0.02	29-MAR-12
Copper (Cu)			<1.0		mg/kg		1	29-MAR-12
Iron (Fe)			<25		mg/kg		25	29-MAR-12
Lead (Pb)			<0.20		mg/kg		0.2	29-MAR-12
Magnesium (Mg)			<10		mg/kg		10	29-MAR-12
Manganese (Mn)			<0.50		mg/kg		0.5	29-MAR-12
Molybdenum (Mo)			<0.020		mg/kg		0.02	29-MAR-12
Nickel (Ni)			<0.50		mg/kg		0.5	29-MAR-12
Phosphorus (P)			<100		mg/kg		100	29-MAR-12
Potassium (K)			<25		mg/kg		25	29-MAR-12
Rubidium (Rb)			<0.020		mg/kg		0.02	29-MAR-12
Selenium (Se)			<0.50		mg/kg		0.5	29-MAR-12
Silver (Ag)			<0.10		mg/kg		0.1	29-MAR-12
Sodium (Na)			<10		mg/kg		10	29-MAR-12
Strontium (Sr)			<0.10		mg/kg		0.1	29-MAR-12
Tellurium (Te)			<0.10		mg/kg		0.1	29-MAR-12
Thallium (Tl)			<0.10		mg/kg		0.1	29-MAR-12
Tin (Sn)			<5.0		mg/kg		5	29-MAR-12
Titanium (Ti)			<0.50		mg/kg		0.5	29-MAR-12
Tungsten (W)			<0.050		mg/kg		0.05	29-MAR-12
Uranium (U)			<0.020		mg/kg		0.02	29-MAR-12
Vanadium (V)			<0.50		mg/kg		0.5	29-MAR-12
Zinc (Zn)			<10		mg/kg		10	29-MAR-12
Zirconium (Zr)			<0.10		mg/kg		0.1	29-MAR-12
PAH,PANH-WP	**Soil**							
Batch R2344518								
WG1449360-2 LCS								
1-Methyl Naphthalene			67.7		%		60-130	28-MAR-12
2-Methyl Naphthalene			67.0		%		60-130	28-MAR-12
Acenaphthene			80.0		%		60-130	28-MAR-12
Acenaphthylene			78.9		%		60-130	28-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2344518								
WG1449360-2 LCS								
Acridine			76.3		%		60-130	28-MAR-12
Anthracene			77.6		%		60-130	28-MAR-12
Benzo(a)anthracene			72.5		%		60-130	28-MAR-12
Benzo(a)pyrene			95.1		%		60-130	28-MAR-12
Benzo(b)fluoranthene			91.3		%		60-130	28-MAR-12
Benzo(b&j)fluoranthene			92.1		%		60-130	28-MAR-12
Benzo(g,h,i)perylene			84.7		%		60-130	28-MAR-12
Benzo(k)fluoranthene			87.2		%		60-130	28-MAR-12
Chrysene			84.8		%		60-130	28-MAR-12
Dibenzo(a,h)anthracene			92.3		%		60-130	28-MAR-12
Fluoranthene			89.1		%		60-130	28-MAR-12
Fluorene			76.6		%		60-130	28-MAR-12
Indeno(1,2,3-cd)pyrene			83.2		%		60-130	28-MAR-12
Naphthalene			61.2		%		50-130	28-MAR-12
Phenanthrene			84.0		%		60-130	28-MAR-12
Pyrene			87.2		%		60-130	28-MAR-12
Quinoline			62.2		%		60-130	28-MAR-12
WG1449360-1 MB								
1-Methyl Naphthalene			<0.010		mg/kg		0.01	28-MAR-12
2-Methyl Naphthalene			<0.010		mg/kg		0.01	28-MAR-12
Acenaphthene			<0.0050		mg/kg		0.005	28-MAR-12
Acenaphthylene			<0.0050		mg/kg		0.005	28-MAR-12
Acridine			<0.010		mg/kg		0.01	28-MAR-12
Anthracene			<0.0040		mg/kg		0.004	28-MAR-12
Benzo(a)anthracene			<0.010		mg/kg		0.01	28-MAR-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	28-MAR-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	28-MAR-12
Benzo(b&j)fluoranthene			<0.010		mg/kg		0.01	28-MAR-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	28-MAR-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	28-MAR-12
Chrysene			<0.010		mg/kg		0.01	28-MAR-12
Dibenzo(a,h)anthracene			<0.0050		mg/kg		0.005	28-MAR-12
Fluoranthene			<0.010		mg/kg		0.01	28-MAR-12
Fluorene			<0.010		mg/kg		0.01	28-MAR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2344518								
WG1449360-1 MB								
Indeno(1,2,3-cd)pyrene			<0.010		mg/kg		0.01	28-MAR-12
Naphthalene			<0.010		mg/kg		0.01	28-MAR-12
Phenanthrene			<0.010		mg/kg		0.01	28-MAR-12
Pyrene			<0.010		mg/kg		0.01	28-MAR-12
Quinoline			<0.010		mg/kg		0.01	28-MAR-12
Surrogate: Acenaphthene d10			52.2		%		50-150	28-MAR-12
Surrogate: Chrysene d12			78.2		%		50-150	28-MAR-12
Surrogate: Naphthalene d8			29.3		%		50-150	28-MAR-12
Surrogate: Phenanthrene d10			80.4		%		50-150	28-MAR-12

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

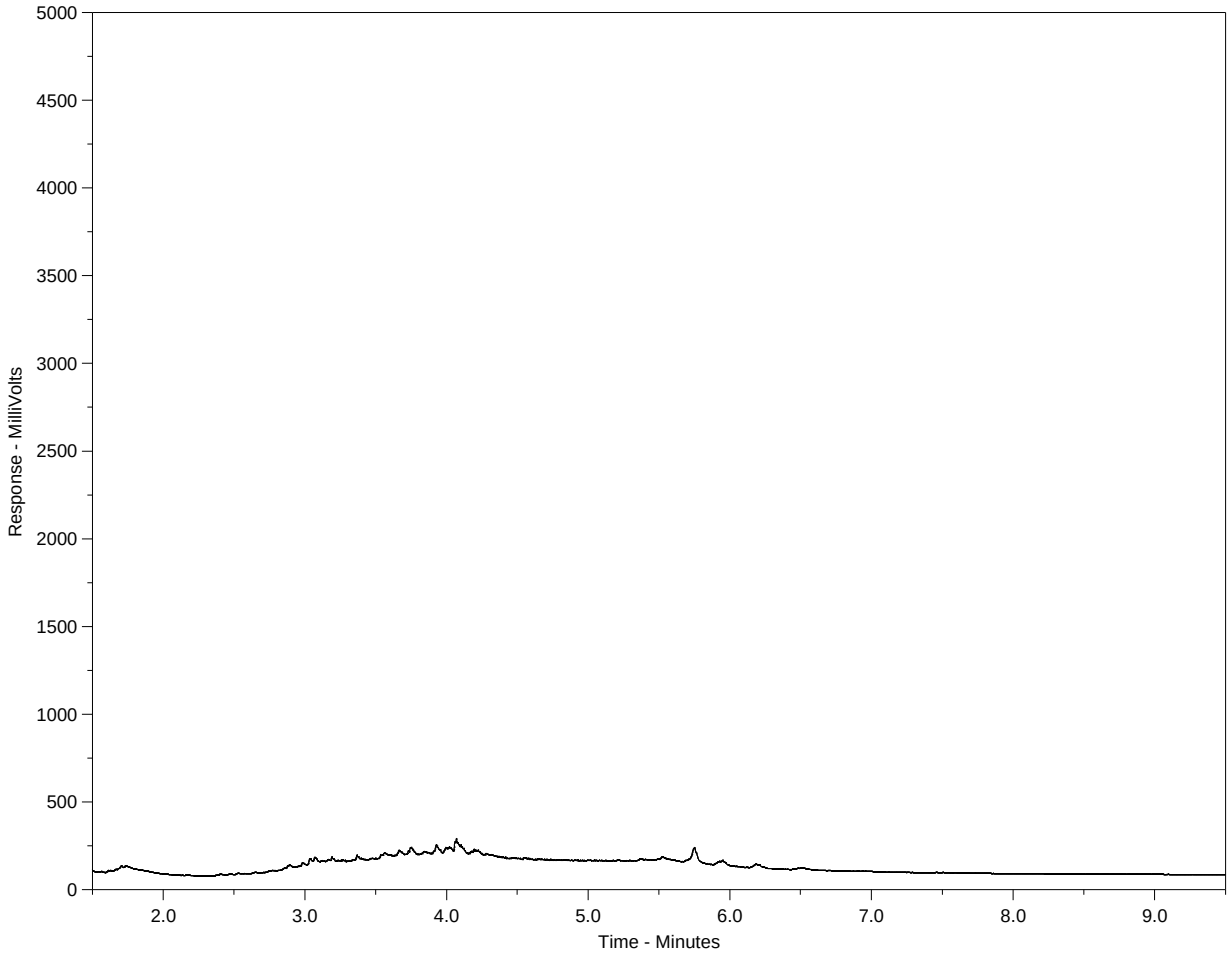
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-25**
Client ID: **TP15 S2/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

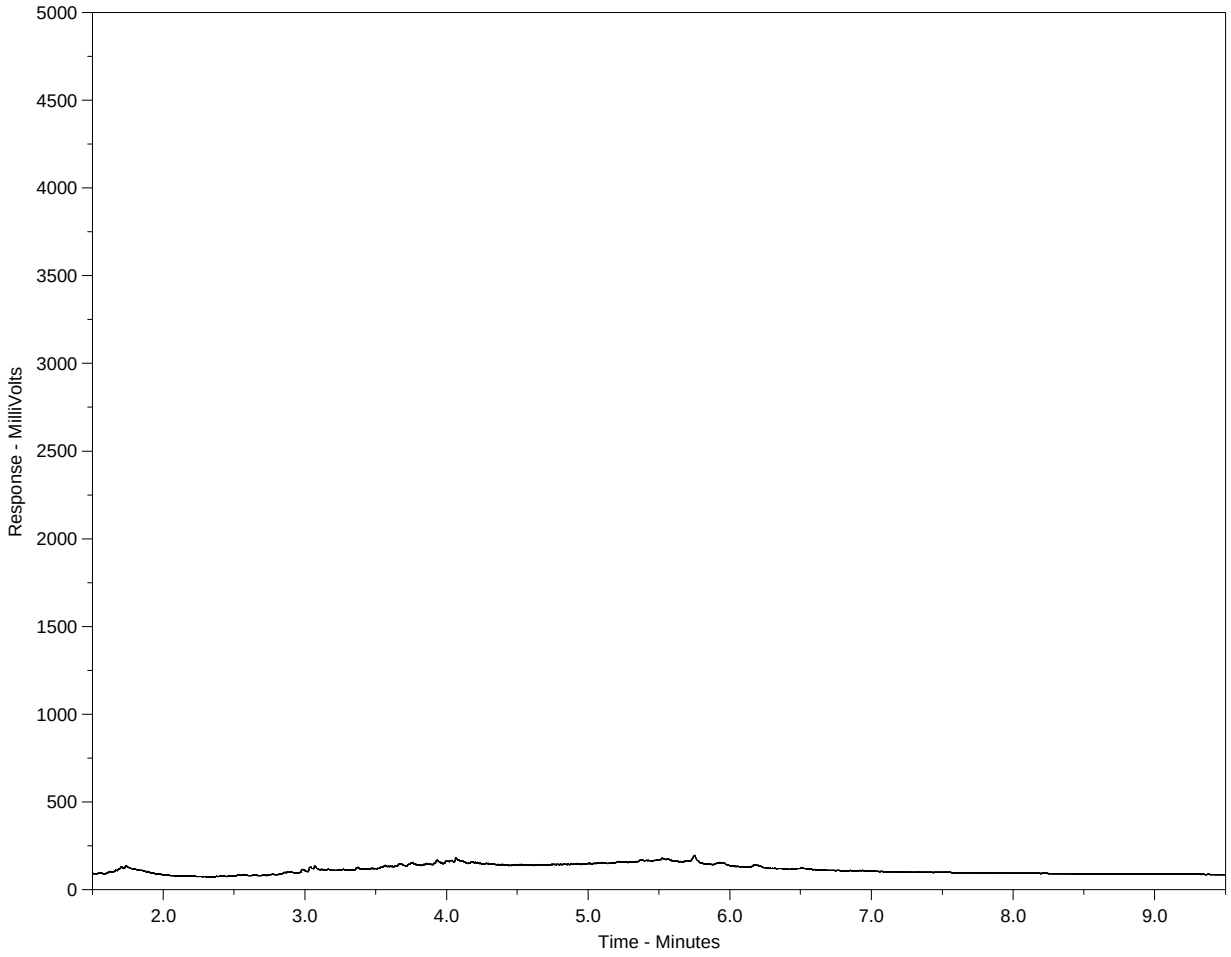
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-26**
Client ID: **TP9 S3/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

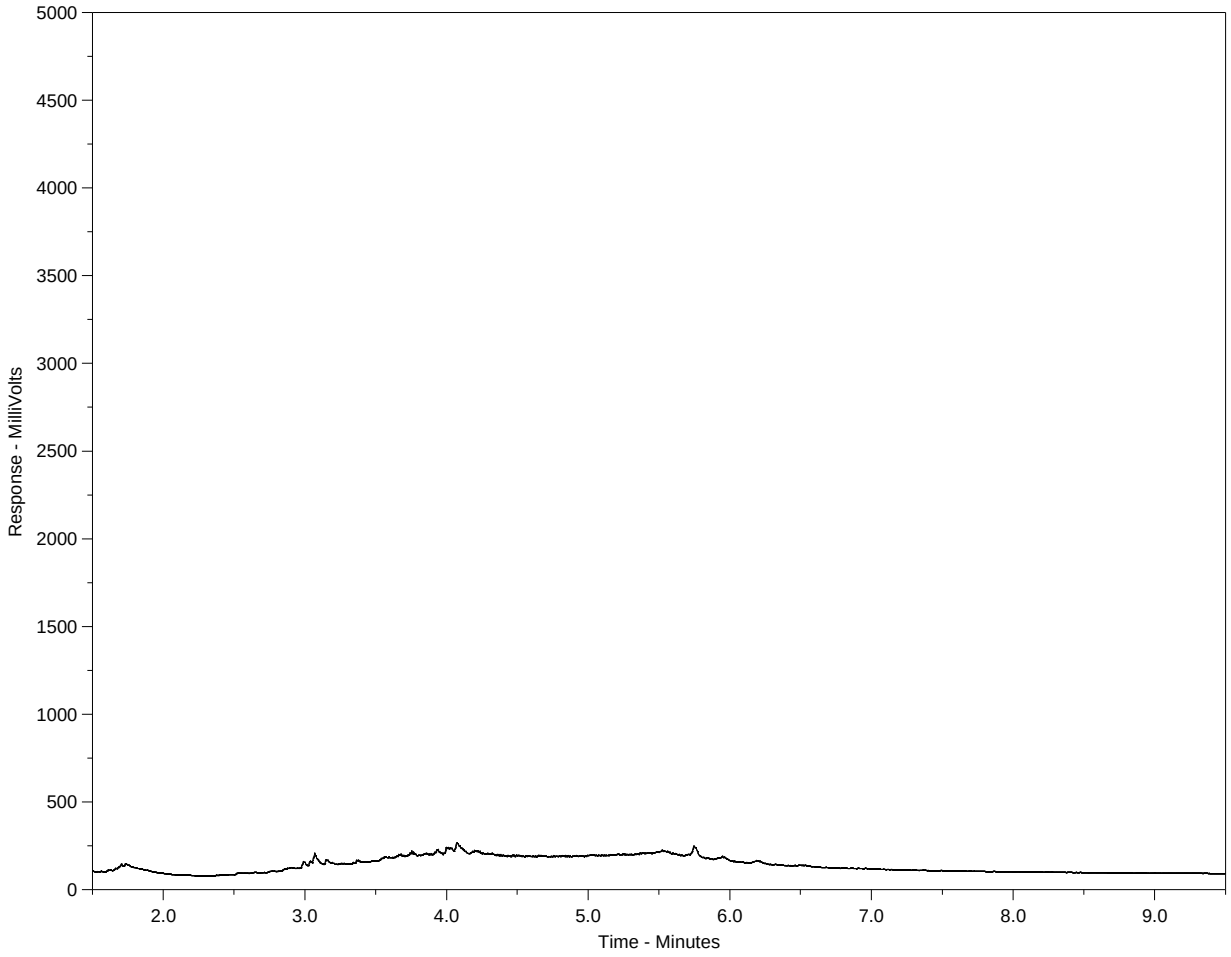
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-27**
Client ID: **TP26 S3/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11----------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

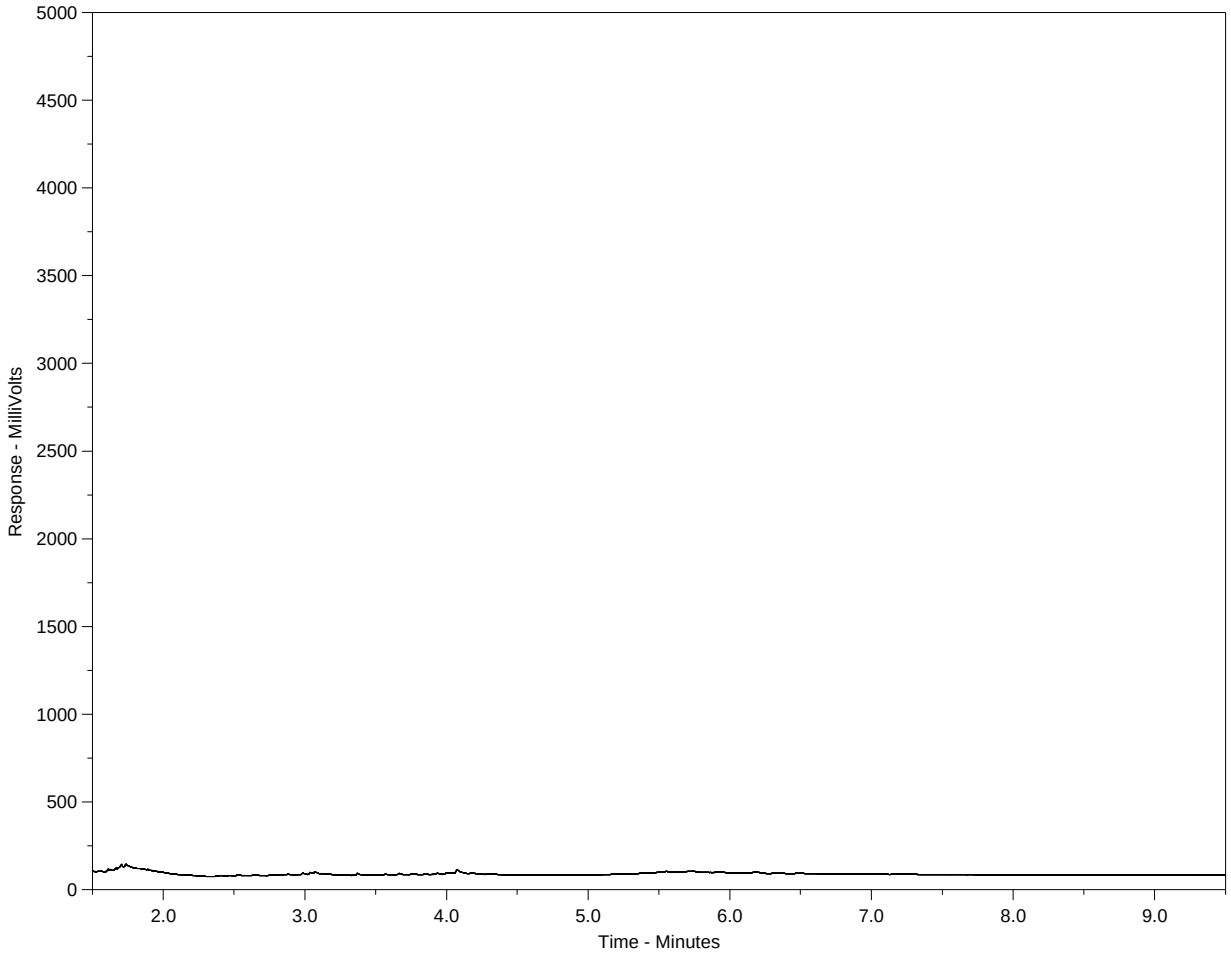
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-28**
Client ID: **TP21 S3/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

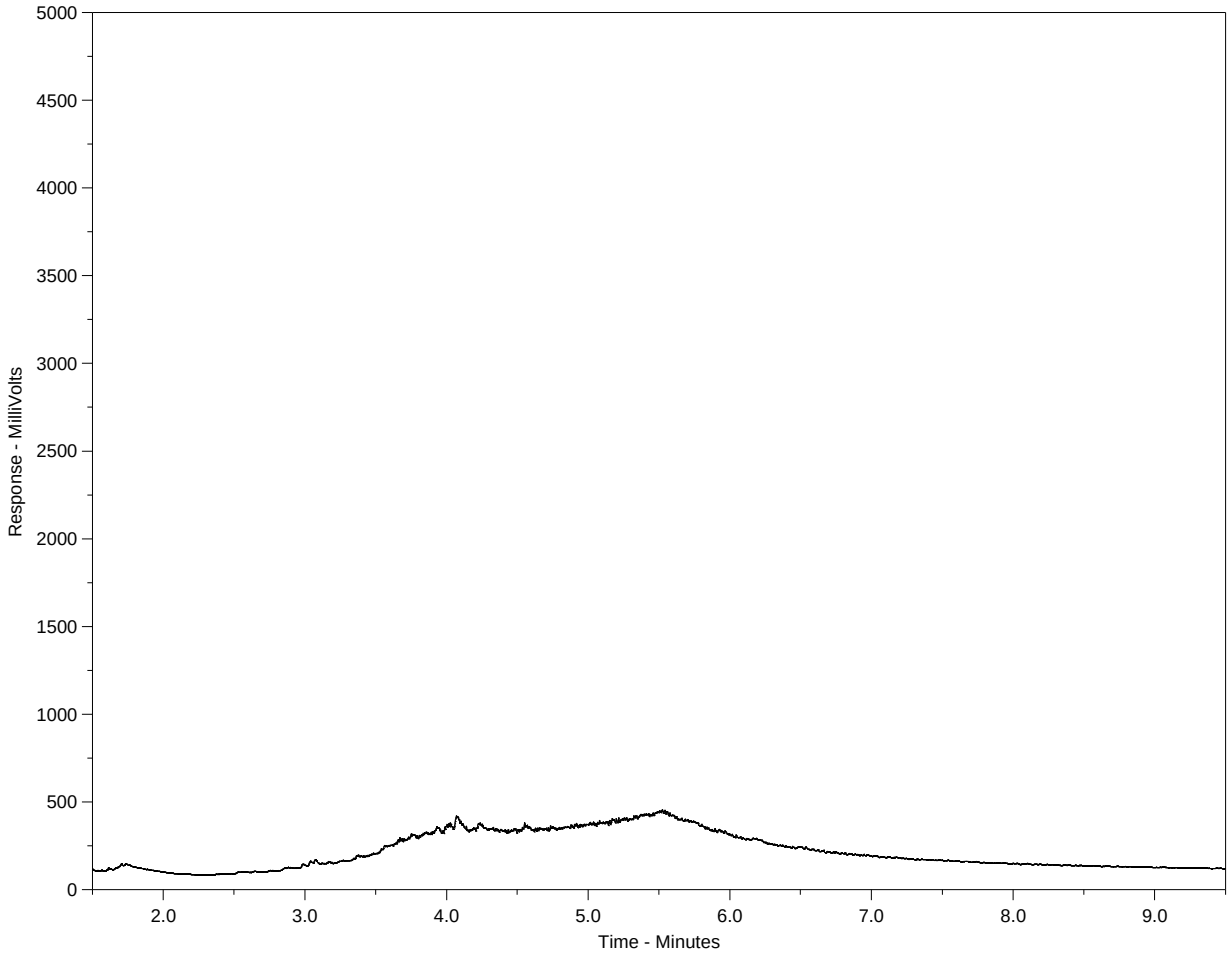
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-29**
Client ID: **TP3 S2/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

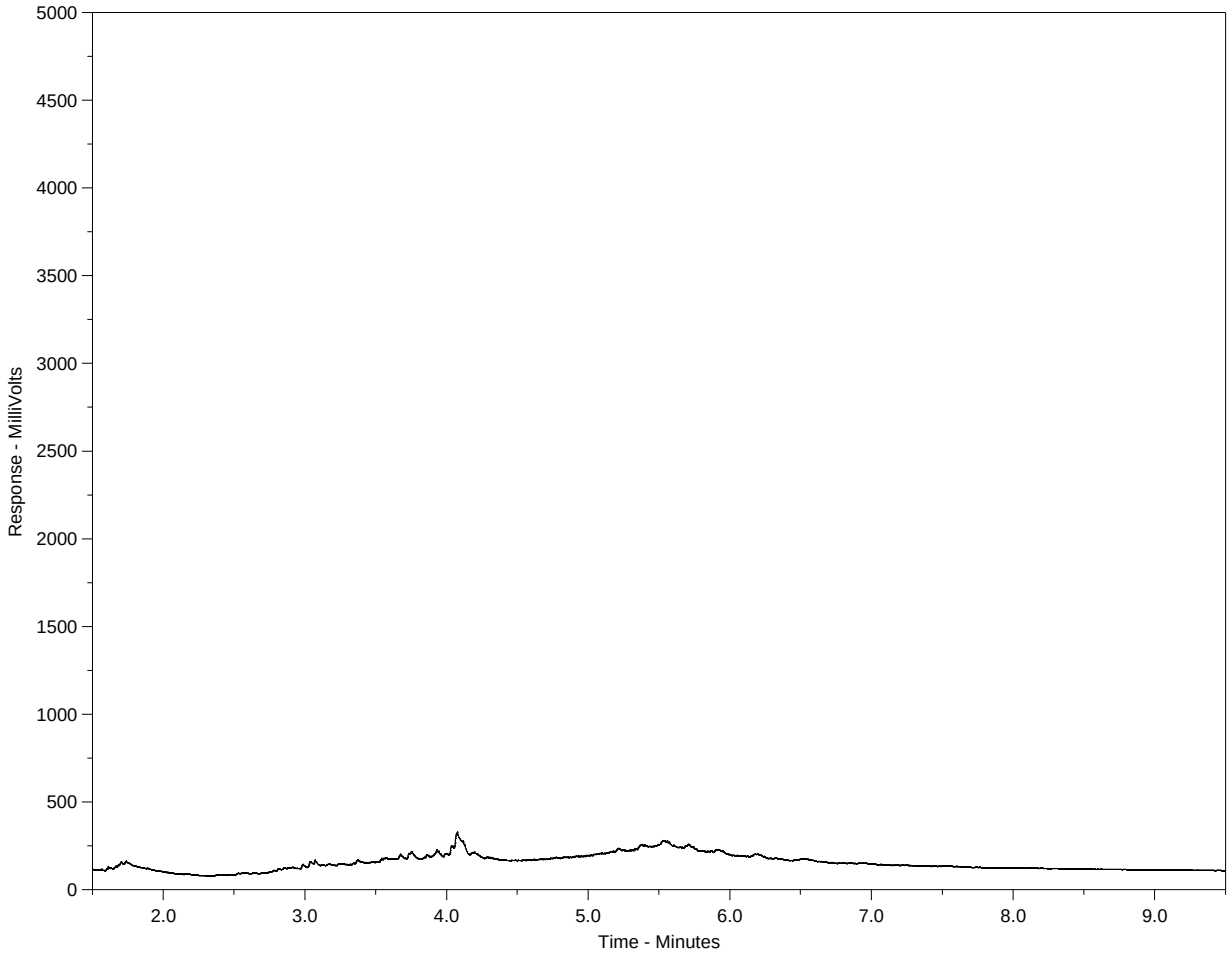
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128263-30**
Client ID: **TP5 S3/JAR**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

L1128263-COFC

ical Request Form
800 668 9878
il.com

10-023329

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Report To		Report Format / Distribution		Service Requested: (Rush subject to availability)	
Company:	KGS Group	Standard: X Other (specify):			Regular (Standard Turnaround Times))
Contact:	Lois Sinclair	Select: PDF X Excel X Digital Fax			Priority, Date Req'd: (Surcharges apply)
Address:	865 Waverley St	Email 1: RSINCLAIR@KGSGroup.com		X	Emergency (1 Business Day) - 100% Surcharge
		Email 2: Dave L Anders@KGSGroup.com			For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	896-1209 Fax: 896-0754			Analysis Request	
Invoice To	Same as Report ? (circle) Yes or (No) (if No, provide details)	**Client / Project Information**		(Indicate Filtered or Preserved, F/P)	
	Copy of Invoice with Report? (circle) (Yes) or No	Job #:	Elmwood/North Landfill		
Company:	KGS Group	PO / AFE:			
Contact:	Bill Macguarrie	LSD:			
Address:	865 Waverley St				
Phone:	896-1202 Fax: 896-0754	Quote #:			
Lab Work Order # (lab use only)		**ALS Contact:** Judy	**Sampler:** ADS/JHL		

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals	Number of Containers
	TP 3 S2	27 Mar 12	0830	BAG	X	
	TP 4 S1		0850		X	
	TP 5 S3		0910		X	
	TP 6 S3		0930		X	
	TP 7 S2		0950		X	
	TP 8 S3		1010		X	
	TP 9 S3		1030		X	
	TP 10 S1		1050		X	
	TP 11 S1		1110		X	
	TP 12 S3		1130		X	
	TP 13 S3		1150		X	
	TP 14 S2		1210		X	

Special Instructions / Regulations / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				27 MAR 12	16:25	11 °C				

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION | WHITE - LABORATORY COPY | YELLOW - CLIENT COPY | GENF 18.01 Front

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

L1128263-COFC

nalytical Request Form
e: 1 800 668 9878
global.com

10-023328

Page 2 of 3

Report To		**Report Format / Distribution**	**Service Requested:** (Rush subject to availability)
Company:		Standard: X Other (specify):	Regular (Standard Turnaround Times))
Contact:		Select: PDF X Excel X Digital Fax	Priority, Date Req'd: (Surcharges apply)
Address:		Email 1: RSinclair@KGSGroup.com	X Emergency (1 Business Day) - 100% Surcharge
		Email 2: LAnders@KGSGroup.com	For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone: Fax:			**Analysis Request**
Invoice To Same as Report ? (circle) Yes or No (if No, provide details)		**Client / Project Information**	(Indicate Filtered or Preserved, F/P)
Copy of Invoice with Report? (circle) Yes or No		Job #:	
Company:		PO / AFE:	
Contact:		LSD:	
Address:			
Phone: Fax:		Quote #:	
Lab Work Order # (lab use only)		**ALS Contact:**	**Sampler:**

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals	Number of Containers
	TP 15 S2	27MarA	1230	BAG	X	
	TP 16 S3		1250		X	
	TP 17 S1		1310		X	
	TP 18 S2		1330		X	
	TP 19 S2		1350		X	
	TP 20 S1		1410		X	
	TP 21 S3		1430		X	
	TP 22 S3		1450		X	
	TP 23 S3		1510		X	
	TP 24 S1		1530		X	
	TP 25 S3		1550		X	
	TP 26 S3		1610		X	

RUSH

Special Instructions / Regulations / Hazardous Details

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SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				27MAR12	16:25	11 °C				

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

L1128263-COFC

Request Form
68 9878

10-023330

Page 3 of 3

Report To	**Report Format / Distribution**	**Service Requested:** (Rush subject to availability)
Company:	Standard: ____ Other (specify): ____	Regular (Standard Turnaround Times))
Contact:	Select: PDF ____ Excel ____ Digital ____ Fax ____	Priority, Date Req'd: ____ (Surcharges apply)
Address:	Email 1:	X Emergency (1 Business Day) - 100% Surcharge
	Email 2:	For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone: Fax:		**Analysis Request**
Invoice To Same as Report ? (circle) Yes or No (if No, provide details)	**Client / Project Information**	(Indicate Filtered or Preserved, F/P)
Copy of Invoice with Report? (circle) Yes or No	Job #:	
Company:	PO / AFE:	
Contact:	LSD:	
Address:		
Phone: Fax:	Quote #:	
Lab Work Order # (lab use only)	**ALS Contact:** / **Sampler:**	

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	BTEX	F1-F4	PAH	METALS								Number of Containers
25	TP 15 S2	27March		Jar	X	X	X									3
26	TP 9 S3			Jar	X	X	X									3
27	TP 26 S3			Jar	X	X	X									3
28	TP 21 S3			Jar	X	X	X									3
29	TP 3 S2			Jar	X	X	X									3
30	TP 5 S3			Jar	X	X	X									3
	TP 101 S2			BAG				X								1
	TP 102 S2			BAG				X								1

100% RUSH

Special Instructions / Regulations / Hazardous Details

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By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				27MAR12	16:25	11 °C				

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION | WHITE - LABORATORY COPY | YELLOW - CLIENT COPY | GENF 18.01 Front

KGS Group Consultants (Winnipeg)
ATTN: Rob Sinclair
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4

Date Received: 28-MAR-12
Report Date: 09-APR-12 15:45 (MT)
Version: FINAL

Client Phone: 204-896-1209

Certificate of Analysis

Lab Work Order #: L1128718

Project P.O. #: NOT SUBMITTED
Job Reference: ELMWOOD LANDFILL
C of C Numbers:
Legal Site Desc:

Robert S. Kitlar
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-1 PL COMP S1							
Sampled By: CLIENT on 28-MAR-12 @ 10:00							
Matrix: SOIL							
Metals							
Aluminum (Al)	6570		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.57		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	2.72		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	71.9		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.40		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.073		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	12		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.216		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	88300		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	0.565		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	18.4		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	4.02		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	22.8		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	11100		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	31.4		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	32100		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	216		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.659		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	13.1		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	360		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	1520		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	11.3		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.33		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	190		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	61.0		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	168		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	0.346		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.480		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	22.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	72		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	1.26		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-2 PL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 10:15							
Matrix: SOIL							
Metals							
Aluminum (Al)	13700		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.46		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	4.21		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	109		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.55		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.125		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	13		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.214		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	64100		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.03		0.020	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-2 PL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 10:15							
Matrix: SOIL							
Metals							
Chromium (Cr)	26.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	7.26		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	20.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	17600		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	23.4		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	26800		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	309		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.565		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	20.9		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	410		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	2760		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	21.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	396		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	58.1		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.16		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	189		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	0.066		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.783		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	38.5		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	101		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	6.12		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-3 PL COMP S3							
Sampled By: CLIENT on 28-MAR-12 @ 10:30							
Matrix: SOIL							
Metals							
Aluminum (Al)	22500		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.32		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	5.59		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	139		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.98		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.171		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	17		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.295		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	34800		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.18		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	34.9		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	9.97		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	25.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	23000		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	21.5		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	18500		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	367		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.413		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	28.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	520		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	4360		25	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-3 PL COMP S3							
Sampled By: CLIENT on 28-MAR-12 @ 10:30							
Matrix: SOIL							
Metals							
Rubidium (Rb)	30.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.11		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	348		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	59.8		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.23		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	153		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.989		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	56.1		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	82		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	6.66		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-4 PL COMP S4							
Sampled By: CLIENT on 28-MAR-12 @ 10:45							
Matrix: SOIL							
Metals							
Aluminum (Al)	23300		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.42		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	5.47		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	197		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.91		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.207		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	18		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.215		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	42300		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.80		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	44.2		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	11.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	30.6		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	27500		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	26.7		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	24300		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	522		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.505		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	34.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	510		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	4590		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	39.3		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.16		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	490		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	68.2		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.30		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	524		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	1.01		0.020	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-4 PL COMP S4							
Sampled By: CLIENT on 28-MAR-12 @ 10:45							
Matrix: SOIL							
Metals							
Vanadium (V)	65.4		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	94		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	14.8		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-5 PL COMP S5							
Sampled By: CLIENT on 28-MAR-12 @ 11:00							
Matrix: SOIL							
Metals							
Aluminum (Al)	16300		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.45		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	5.82		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	153		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.66		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.151		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	18		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.254		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	69200		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.12		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	30.1		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	7.97		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	24.2		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	20200		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	36.2		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	28600		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	369		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.642		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	23.7		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	450		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	3150		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	25.6		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.13		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	453		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	83.8		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.19		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	178		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	0.063		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.875		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	48.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	82		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	8.26		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-6 PL COMP S6							
Sampled By: CLIENT on 28-MAR-12 @ 11:15							
Matrix: SOIL							
Metals							
Aluminum (Al)	2880		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.34		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	1.42		0.10	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-6 PL COMP S6							
Sampled By: CLIENT on 28-MAR-12 @ 11:15							
Matrix: SOIL							
Metals							
Barium (Ba)	36.8		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.15		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.034		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	<10		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.174		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	89300		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	0.298		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	13.6		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	2.09		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	15.4		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	7140		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	20.5		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	27800		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	154		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.561		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	6.39		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	220		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	626		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	5.15		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	141		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	45.8		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	143		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	0.190		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.321		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	11.2		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	68		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	1.47		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-7 WENZEL COMP S1							
Sampled By: CLIENT on 28-MAR-12 @ 12:00							
Matrix: SOIL							
Metals							
Aluminum (Al)	23400		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.36		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	7.44		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	159		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	1.21		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.232		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	13		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.316		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	30000		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.46		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	40.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	14.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	29.1		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	29900		25	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-7 WENZEL COMP S1							
Sampled By: CLIENT on 28-MAR-12 @ 12:00							
Matrix: SOIL							
Metals							
Lead (Pb)	11.7		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	15900		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	692		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	1.38		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	41.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	450		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	3660		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	33.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	0.66		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.17		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	402		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	73.7		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.24		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	121		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	1.51		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	63.5		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	81		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	14.5		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-8 WENZEL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 12:15							
Matrix: SOIL							
Metals							
Aluminum (Al)	20000		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.34		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	8.79		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	157		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	1.08		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.223		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	11		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.297		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	31100		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.43		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	36.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	12.0		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	28.5		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	29100		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	10.8		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	14700		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	375		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	1.11		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	34.5		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	450		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	3490		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	32.2		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	1.35		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.18		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	312		10	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-8 WENZEL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 12:15							
Matrix: SOIL							
Metals							
Strontium (Sr)	69.8		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.23		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	75.1		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	1.62		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	57.1		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	76		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	13.6		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-9 WENZEL COMP S3							
Sampled By: CLIENT on 28-MAR-12 @ 12:30							
Matrix: SOIL							
Metals							
Aluminum (Al)	22600		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.28		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	6.02		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	146		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.94		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.196		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	14		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.233		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	49100		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.47		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	37.8		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	10.0		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	24.1		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	23700		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	11.3		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	23300		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	461		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.305		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	30.6		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	430		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	3440		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	33.1		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.13		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	233		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	57.4		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.24		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	203		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.757		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	61.1		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	70		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	10.3		0.10	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-10 WENZEL COMP S4							
Sampled By: CLIENT on 28-MAR-12 @ 12:45							
Matrix: SOIL							
Metals							
Aluminum (Al)	14700		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.17		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	4.71		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	105		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.74		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.126		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	<10		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.106		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	60900		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	0.918		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	26.4		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	8.30		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	18.2		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	18200		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	9.98		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	25100		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	367		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.314		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	22.8		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	340		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	2890		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	21.9		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	187		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	42.5		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.17		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	86.8		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	0.771		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	40.8		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	55		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	8.33		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-11 WENZEL COMP S5							
Sampled By: CLIENT on 28-MAR-12 @ 13:00							
Matrix: SOIL							
Metals							
Aluminum (Al)	23100		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.37		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	8.26		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	175		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	1.29		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.257		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	11		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.299		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	16400		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.58		0.020	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-11 WENZEL COMP S5							
Sampled By: CLIENT on 28-MAR-12 @ 13:00							
Matrix: SOIL							
Metals							
Chromium (Cr)	45.3		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	13.7		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	34.1		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	32500		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	12.4		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	12200		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	503		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	1.53		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	42.4		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	490		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	4100		25	mg/kg	02-APR-12	02-APR-12	R2346069
Rubidium (Rb)	35.8		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	0.69		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.17		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	379		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	68.2		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.27		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	77.8		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	1.52		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	68.2		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	90		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	14.5		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-12 WENZEL COMP S6							
Sampled By: CLIENT on 28-MAR-12 @ 13:15							
Matrix: SOIL							
Metals							
Aluminum (Al)	17000		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Antimony (Sb)	0.27		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Arsenic (As)	5.66		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Barium (Ba)	137		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Beryllium (Be)	0.84		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Bismuth (Bi)	0.161		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Boron (B)	14		10	mg/kg	02-APR-12	02-APR-12	R2346069
Cadmium (Cd)	0.203		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Calcium (Ca)	51900		100	mg/kg	02-APR-12	02-APR-12	R2346069
Cesium (Cs)	1.11		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Chromium (Cr)	30.7		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Cobalt (Co)	8.90		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Copper (Cu)	21.8		1.0	mg/kg	02-APR-12	02-APR-12	R2346069
Iron (Fe)	20600		25	mg/kg	02-APR-12	02-APR-12	R2346069
Lead (Pb)	16.1		0.20	mg/kg	02-APR-12	02-APR-12	R2346069
Magnesium (Mg)	24200		10	mg/kg	02-APR-12	02-APR-12	R2346069
Manganese (Mn)	401		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Molybdenum (Mo)	0.572		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Nickel (Ni)	26.0		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Phosphorus (P)	410		100	mg/kg	02-APR-12	02-APR-12	R2346069
Potassium (K)	2860		25	mg/kg	02-APR-12	02-APR-12	R2346069

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-12 WENZEL COMP S6							
Sampled By: CLIENT on 28-MAR-12 @ 13:15							
Matrix: SOIL							
Metals							
Rubidium (Rb)	26.4		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Selenium (Se)	<0.50		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Silver (Ag)	0.13		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Sodium (Na)	395		10	mg/kg	02-APR-12	02-APR-12	R2346069
Strontium (Sr)	58.6		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tellurium (Te)	<0.10		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Thallium (Tl)	0.20		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
Tin (Sn)	<5.0		5.0	mg/kg	02-APR-12	02-APR-12	R2346069
Titanium (Ti)	163		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Tungsten (W)	<0.050		0.050	mg/kg	02-APR-12	02-APR-12	R2346069
Uranium (U)	1.04		0.020	mg/kg	02-APR-12	02-APR-12	R2346069
Vanadium (V)	48.3		0.50	mg/kg	02-APR-12	02-APR-12	R2346069
Zinc (Zn)	63		10	mg/kg	02-APR-12	02-APR-12	R2346069
Zirconium (Zr)	9.13		0.10	mg/kg	02-APR-12	02-APR-12	R2346069
L1128718-13 PL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 10:15							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	29-MAR-12	03-APR-12	R2346757
Toluene	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
Ethyl benzene	<0.015		0.015	mg/kg	29-MAR-12	03-APR-12	R2346757
o-Xylene	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
m+p-Xylenes	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
Xylenes	<0.10		0.10	mg/kg	29-MAR-12	03-APR-12	R2346757
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				30-MAR-12	30-MAR-12	R2346362
Prep/Analysis Dates					30-MAR-12	30-MAR-12	R2346362
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		05-APR-12	
F1-BTEX	<10		10	mg/kg		05-APR-12	
F2 (C10-C16)	<10		10	mg/kg		05-APR-12	
F2-Naphth	<10		10	mg/kg		05-APR-12	
F3 (C16-C34)	78		50	mg/kg		05-APR-12	
F3-PAH	78		50	mg/kg		05-APR-12	
F4 (C34-C50)	82		50	mg/kg		05-APR-12	
Total Hydrocarbons (C6-C50)	160		50	mg/kg		05-APR-12	
Miscellaneous Parameters							
% Moisture	21		0.10	%	29-MAR-12	30-MAR-12	R2344793
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
2-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Acenaphthene	0.0054		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Acenaphthylene	<0.0050		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Acridine	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Anthracene	0.0147		0.0040	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)anthracene	0.042		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)pyrene	0.042		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b)fluoranthene	0.051		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b&j)fluoranthene	0.049		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(g,h,i)perylene	0.025		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-13 PL COMP S2							
Sampled By: CLIENT on 28-MAR-12 @ 10:15							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Benzo(k)fluoranthene	0.017		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Chrysene	0.037		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Dibenzo(a,h)anthracene	0.0069		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluoranthene	0.095		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluorene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Indeno(1,2,3-cd)pyrene	0.042		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Phenanthrene	0.066		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Pyrene	0.073		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Quinoline	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
B(a)P Total Potency Equivalent	0.065		0.020	mg/kg	30-MAR-12	04-APR-12	R2346963
IACR (CCME)	0.73		0.15	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b+j+k)fluoranthene	0.066		0.014	mg/kg	30-MAR-12	04-APR-12	R2346963
Surrogate: Acenaphthene d10	89.4		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Chrysene d12	78.3		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Naphthalene d8	87.4		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Phenanthrene d10	90.5		50-150	%	30-MAR-12	04-APR-12	R2346963
L1128718-14 PL COMP S5							
Sampled By: CLIENT on 28-MAR-12 @ 11:00							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	29-MAR-12	03-APR-12	R2346757
Toluene	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
Ethyl benzene	<0.015		0.015	mg/kg	29-MAR-12	03-APR-12	R2346757
o-Xylene	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
m+p-Xylenes	<0.050		0.050	mg/kg	29-MAR-12	03-APR-12	R2346757
Xylenes	<0.10		0.10	mg/kg	29-MAR-12	03-APR-12	R2346757
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				30-MAR-12	30-MAR-12	R2346362
Prep/Analysis Dates					30-MAR-12	30-MAR-12	R2346362
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		05-APR-12	
F1-BTEX	<10		10	mg/kg		05-APR-12	
F2 (C10-C16)	<10		10	mg/kg		05-APR-12	
F2-Naphth	<10		10	mg/kg		05-APR-12	
F3 (C16-C34)	53		50	mg/kg		05-APR-12	
F3-PAH	53		50	mg/kg		05-APR-12	
F4 (C34-C50)	68		50	mg/kg		05-APR-12	
Total Hydrocarbons (C6-C50)	121		50	mg/kg		05-APR-12	
Miscellaneous Parameters							
% Moisture	23		0.10	%	29-MAR-12	30-MAR-12	R2344793
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
2-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Acenaphthene	<0.0050		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Acenaphthylene	<0.0050		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Acridine	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Anthracene	0.0055		0.0040	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)anthracene	0.021		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)pyrene	0.022		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-14 PL COMP S5							
Sampled By: CLIENT on 28-MAR-12 @ 11:00							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Benzo(b)fluoranthene	0.031		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b&j)fluoranthene	0.031		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(g,h,i)perylene	0.026		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Chrysene	0.018		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluoranthene	0.040		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluorene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Indeno(1,2,3-cd)pyrene	0.041		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Phenanthrene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Pyrene	0.032		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Quinoline	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
B(a)P Total Potency Equivalent	0.035		0.020	mg/kg	30-MAR-12	04-APR-12	R2346963
IACR (CCME)	0.39		0.15	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b+j+k)fluoranthene	0.031		0.014	mg/kg	30-MAR-12	04-APR-12	R2346963
Surrogate: Acenaphthene d10	89.3		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Chrysene d12	79.0		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Naphthalene d8	90.4		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Phenanthrene d10	94.1		50-150	%	30-MAR-12	04-APR-12	R2346963
L1128718-15 WENZEL COMP S4							
Sampled By: CLIENT on 28-MAR-12 @ 12:45							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	29-MAR-12	04-APR-12	R2346757
Toluene	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
Ethyl benzene	<0.015		0.015	mg/kg	29-MAR-12	04-APR-12	R2346757
o-Xylene	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
m+p-Xylenes	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
Xylenes	<0.10		0.10	mg/kg	29-MAR-12	04-APR-12	R2346757
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	NO				30-MAR-12	30-MAR-12	R2346362
Prep/Analysis Dates					30-MAR-12	30-MAR-12	R2346362
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		05-APR-12	
F1-BTEX	<10		10	mg/kg		05-APR-12	
F2 (C10-C16)	67		10	mg/kg		05-APR-12	
F2-Naphth	67		10	mg/kg		05-APR-12	
F3 (C16-C34)	1770		50	mg/kg		05-APR-12	
F3-PAH	1770		50	mg/kg		05-APR-12	
F4 (C34-C50)	1560		50	mg/kg		05-APR-12	
F4G-SG (GHH-Silica)	6990		500	mg/kg		05-APR-12	
Total Hydrocarbons (C6-C50)	3400		50	mg/kg		05-APR-12	
Miscellaneous Parameters							
% Moisture	20		0.10	%	29-MAR-12	30-MAR-12	R2344793
Prep/Analysis Dates						04-APR-12	R2347101
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
2-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Acenaphthene	0.0085		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-15 WENZEL COMP S4							
Sampled By: CLIENT on 28-MAR-12 @ 12:45							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
Acenaphthylene	<0.0050		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Acridine	<0.10	DLM	0.10	mg/kg	30-MAR-12	04-APR-12	R2346963
Anthracene	0.0068		0.0040	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)anthracene	<0.10	DLM	0.10	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(a)pyrene	0.183		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b)fluoranthene	0.180		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b&j)fluoranthene	0.175		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(g,h,i)perylene	0.203		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(k)fluoranthene	0.018		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Chrysene	<0.15	DLM	0.15	mg/kg	30-MAR-12	04-APR-12	R2346963
Dibenzo(a,h)anthracene	0.0933		0.0050	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluoranthene	<0.10	DLM	0.10	mg/kg	30-MAR-12	04-APR-12	R2346963
Fluorene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Indeno(1,2,3-cd)pyrene	0.027		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Phenanthrene	0.055		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Pyrene	0.278		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
Quinoline	<0.010		0.010	mg/kg	30-MAR-12	04-APR-12	R2346963
B(a)P Total Potency Equivalent	0.307		0.020	mg/kg	30-MAR-12	04-APR-12	R2346963
IACR (CCME)	2.37		0.28	mg/kg	30-MAR-12	04-APR-12	R2346963
Benzo(b+j+k)fluoranthene	0.193		0.014	mg/kg	30-MAR-12	04-APR-12	R2346963
Surrogate: Acenaphthene d10	87.2		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Chrysene d12	90.9		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Naphthalene d8	78.4		50-150	%	30-MAR-12	04-APR-12	R2346963
Surrogate: Phenanthrene d10	89.9		50-150	%	30-MAR-12	04-APR-12	R2346963
L1128718-16 WENZEL COMP S1							
Sampled By: CLIENT on 28-MAR-12 @ 12:00							
Matrix: SOIL							
BTEX plus F1-F4							
BTX by GCMS							
Benzene	<0.0050		0.0050	mg/kg	29-MAR-12	04-APR-12	R2346757
Toluene	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
Ethyl benzene	<0.015		0.015	mg/kg	29-MAR-12	04-APR-12	R2346757
o-Xylene	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
m+p-Xylenes	<0.050		0.050	mg/kg	29-MAR-12	04-APR-12	R2346757
Xylenes	<0.10		0.10	mg/kg	29-MAR-12	04-APR-12	R2346757
CCME Total Extractable Hydrocarbons							
Chrom. to baseline at nC50	YES				30-MAR-12	30-MAR-12	R2346362
Prep/Analysis Dates					30-MAR-12	30-MAR-12	R2346362
CCME Total Hydrocarbons							
F1 (C6-C10)	<10		10	mg/kg		05-APR-12	
F1-BTEX	<10		10	mg/kg		05-APR-12	
F2 (C10-C16)	<10		10	mg/kg		05-APR-12	
F2-Naphth	<10		10	mg/kg		05-APR-12	
F3 (C16-C34)	<50		50	mg/kg		05-APR-12	
F3-PAH	<50		50	mg/kg		05-APR-12	
F4 (C34-C50)	<50		50	mg/kg		05-APR-12	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg		05-APR-12	
Miscellaneous Parameters							
% Moisture	29		0.10	%	29-MAR-12	30-MAR-12	R2344793
Polyaromatic Hydrocarbons (PAHs)							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1128718-16 WENZEL COMP S1							
Sampled By: CLIENT on 28-MAR-12 @ 12:00							
Matrix: SOIL							
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
2-Methyl Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Acenaphthene	<0.0050		0.0050	mg/kg	30-MAR-12	03-APR-12	R2346963
Acenaphthylene	<0.0050		0.0050	mg/kg	30-MAR-12	03-APR-12	R2346963
Acridine	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Anthracene	<0.0040		0.0040	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(a)anthracene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(a)pyrene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(b)fluoranthene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(b&j)fluoranthene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(g,h,i)perylene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(k)fluoranthene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Chrysene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Dibenzo(a,h)anthracene	<0.0050		0.0050	mg/kg	30-MAR-12	03-APR-12	R2346963
Fluoranthene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Fluorene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Indeno(1,2,3-cd)pyrene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Naphthalene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Phenanthrene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Pyrene	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
Quinoline	<0.010		0.010	mg/kg	30-MAR-12	03-APR-12	R2346963
B(a)P Total Potency Equivalent	<0.020		0.020	mg/kg	30-MAR-12	03-APR-12	R2346963
IACR (CCME)	<0.15		0.15	mg/kg	30-MAR-12	03-APR-12	R2346963
Benzo(b+j+k)fluoranthene	<0.014		0.014	mg/kg	30-MAR-12	03-APR-12	R2346963
Surrogate: Acenaphthene d10	90.7		50-150	%	30-MAR-12	03-APR-12	R2346963
Surrogate: Chrysene d12	79.8		50-150	%	30-MAR-12	03-APR-12	R2346963
Surrogate: Naphthalene d8	92.7		50-150	%	30-MAR-12	03-APR-12	R2346963
Surrogate: Phenanthrene d10	92.8		50-150	%	30-MAR-12	03-APR-12	R2346963

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
DLM	Detection Limit Adjusted For Sample Matrix Effects

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BTEXS+F1-HSMS-WP	Soil	BTX by GCMS	EPA SW846 8260B REV 2

The soil methanol extract is added to water and reagents, then heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

ETL-OGG-CCME-WP	Soil	CCME Gravimetric Heavy Hydrocarbons (SG)	CCME CWS-PHC Dec-2000 - Pub# 1310-S
ETL-TEH-CCME-WP	Soil	CCME Total Extractable Hydrocarbons	CCME CWS-PHC Dec-2000 - Pub# 1310

A soil or sediment sample weight of ~10g is extracted with 1:1 hexane/acetone by either soxhlet or automated extraction procedures. Half the extract is used for gravimetric determination of heavy hydrocarbons and the other half is used for GC analysis. Both extracts are cleaned-up with silica gel to facilitate separation of the hydrocarbons from other polar extractables. An aliquot of the remaining solvent is analyzed using a gas chromatograph equipped with a flame-ionization detector.

ETL-TVH,TEH-CCME-WP	Soil	CCME Total Hydrocarbons	CCME CWS-PHC DEC-2000 - PUB# 1310-S

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

MET-200.2-MS-WP	Soil	Metals	EPA 200.8/200.2 /BCMOE-S

This analysis is carried out using procedures adapted from US EPA method 200.2. Sample preparation procedure for spectrochemical determination of total recoverable elements . Soil samples are dried (<60 C) and homogenized and a representative subsample of the dry material is digested. The digested samples are analyzed by ICPMS.

The results are reported as mg/Kg dry weight or mg/Kg wet weight this is equivalent to ug/g dry weight or ug/g wet weight.

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that maybe environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not mobile in the environment. This method has known stability issues for determining Silicon.

PAH,PANH-WP	Soil	Polyaromatic Hydrocarbons (PAHs)	EPA SW 846/8270-GC/MS

Samples are mix with sodium sulfate and extracted with acetone/dichloromethane using a combination of high frequency sonication and shake using a platform shaker. After extract concentration, samples are analyzed by GC/MS.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: KGS Group Consultants (Winnipeg)
865 Waverly Street - 3rd Floor
Winnipeg MB R3T 5P4
Contact: Rob Sinclair

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTEXS+F1-HSMS-WP	**Soil**							
Batch R2346757								
WG1451763-4 DUP		**L1128718-16**						
Benzene		<0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	04-APR-12
Toluene		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	04-APR-12
Ethyl benzene		<0.015	<0.015	RPD-NA	mg/kg	N/A	50	04-APR-12
o-Xylene		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	04-APR-12
m+p-Xylenes		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	04-APR-12
WG1451763-2 LCS								
Benzene			84.6		%		70-130	03-APR-12
Toluene			82.6		%		70-130	03-APR-12
Ethyl benzene			83.9		%		70-130	03-APR-12
o-Xylene			85.1		%		70-130	03-APR-12
m+p-Xylenes			84.6		%		70-130	03-APR-12
WG1451763-1 MB								
Benzene			<0.0050		mg/kg		0.005	03-APR-12
Toluene			<0.050		mg/kg		0.05	03-APR-12
Ethyl benzene			<0.015		mg/kg		0.015	03-APR-12
o-Xylene			<0.050		mg/kg		0.05	03-APR-12
m+p-Xylenes			<0.050		mg/kg		0.05	03-APR-12
ETL-TEH-CCME-WP	**Soil**							
Batch R2346362								
WG1451154-3 DUP		**L1128718-16**						
F2 (C10-C16)		<10	<10	RPD-NA	mg/kg	N/A	50	30-MAR-12
F3 (C16-C34)		<50	<50	RPD-NA	mg/kg	N/A	50	30-MAR-12
F4 (C34-C50)		<50	<50	RPD-NA	mg/kg	N/A	50	30-MAR-12
WG1451154-2 LCS								
F2 (C10-C16)			93.9		%		70-130	30-MAR-12
F3 (C16-C34)			101.4		%		70-130	30-MAR-12
F4 (C34-C50)			100.9		%		70-130	30-MAR-12
WG1451154-1 MB								
F2 (C10-C16)			<10		mg/kg		10	30-MAR-12
F3 (C16-C34)			<50		mg/kg		50	30-MAR-12
F4 (C34-C50)			<50		mg/kg		50	30-MAR-12
MET-200.2-MS-WP	**Soil**							

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2346069								
WG1451674-2 CRM		**NRC PACS-2**						
Aluminum (Al)			106		%		70-130	02-APR-12
Antimony (Sb)			117		%		70-130	02-APR-12
Arsenic (As)			98		%		70-130	02-APR-12
Barium (Ba)			92		%		70-130	02-APR-12
Beryllium (Be)			88		%		70-130	02-APR-12
Boron (B)			94		%		70-130	02-APR-12
Cadmium (Cd)			96		%		70-130	02-APR-12
Calcium (Ca)			97		%		70-130	02-APR-12
Chromium (Cr)			98		%		70-130	02-APR-12
Cobalt (Co)			89		%		70-130	02-APR-12
Copper (Cu)			102		%		70-130	02-APR-12
Iron (Fe)			101		%		70-130	02-APR-12
Lead (Pb)			93		%		70-130	02-APR-12
Magnesium (Mg)			86		%		70-130	02-APR-12
Manganese (Mn)			95		%		70-130	02-APR-12
Molybdenum (Mo)			99		%		70-130	02-APR-12
Nickel (Ni)			92		%		70-130	02-APR-12
Phosphorus (P)			89		%		70-130	02-APR-12
Potassium (K)			87		%		70-130	02-APR-12
Selenium (Se)			123		%		70-130	02-APR-12
Silver (Ag)			108		%		70-130	02-APR-12
Sodium (Na)			91		%		70-130	02-APR-12
Strontium (Sr)			95		%		70-130	02-APR-12
Thallium (Tl)			84		%		70-130	02-APR-12
Tin (Sn)			92		%		70-130	02-APR-12
Titanium (Ti)			119		%		70-130	02-APR-12
Uranium (U)			83		%		70-130	02-APR-12
Vanadium (V)			96		%		70-130	02-APR-12
Zinc (Zn)			92		%		70-130	02-APR-12
WG1451674-3 CRM		**NRC MESS-3**						
Aluminum (Al)			88		%		70-130	02-APR-12
Antimony (Sb)			92		%		70-130	02-APR-12
Arsenic (As)			96		%		70-130	02-APR-12
Barium (Ba)			105		%		70-130	02-APR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2346069								
WG1451674-3 CRM		**NRC MESS-3**						
Beryllium (Be)			81		%		70-130	02-APR-12
Cadmium (Cd)			85		%		70-130	02-APR-12
Calcium (Ca)			102		%		70-130	02-APR-12
Chromium (Cr)			88		%		70-130	02-APR-12
Cobalt (Co)			97		%		70-130	02-APR-12
Copper (Cu)			106		%		70-130	02-APR-12
Iron (Fe)			104		%		70-130	02-APR-12
Lead (Pb)			89		%		70-130	02-APR-12
Magnesium (Mg)			93		%		70-130	02-APR-12
Manganese (Mn)			115		%		70-130	02-APR-12
Molybdenum (Mo)			92		%		70-130	02-APR-12
Nickel (Ni)			99		%		70-130	02-APR-12
Phosphorus (P)			90		%		70-130	02-APR-12
Potassium (K)			75		%		70-130	02-APR-12
Silver (Ag)			95		%		70-130	02-APR-12
Sodium (Na)			100		%		70-130	02-APR-12
Strontium (Sr)			91		%		70-130	02-APR-12
Tin (Sn)			94		%		70-130	02-APR-12
Uranium (U)			84		%		70-130	02-APR-12
Vanadium (V)			78		%		70-130	02-APR-12
Zinc (Zn)			99		%		70-130	02-APR-12
WG1451674-1 MB								
Aluminum (Al)			<5.0		mg/kg		5	02-APR-12
Antimony (Sb)			<0.10		mg/kg		0.1	02-APR-12
Arsenic (As)			<0.10		mg/kg		0.1	02-APR-12
Barium (Ba)			<0.50		mg/kg		0.5	02-APR-12
Beryllium (Be)			<0.10		mg/kg		0.1	02-APR-12
Bismuth (Bi)			<0.020		mg/kg		0.02	02-APR-12
Boron (B)			<10		mg/kg		10	02-APR-12
Cadmium (Cd)			<0.020		mg/kg		0.02	02-APR-12
Calcium (Ca)			<100		mg/kg		100	02-APR-12
Cesium (Cs)			<0.020		mg/kg		0.02	02-APR-12
Chromium (Cr)			<1.0		mg/kg		1	02-APR-12
Cobalt (Co)			<0.020		mg/kg		0.02	02-APR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-MS-WP	**Soil**							
Batch R2346069								
WG1451674-1 MB								
Copper (Cu)			<1.0		mg/kg		1	02-APR-12
Iron (Fe)			<25		mg/kg		25	02-APR-12
Lead (Pb)			<0.20		mg/kg		0.2	02-APR-12
Magnesium (Mg)			<10		mg/kg		10	02-APR-12
Manganese (Mn)			<0.50		mg/kg		0.5	02-APR-12
Molybdenum (Mo)			<0.020		mg/kg		0.02	02-APR-12
Nickel (Ni)			<0.50		mg/kg		0.5	02-APR-12
Phosphorus (P)			<100		mg/kg		100	02-APR-12
Potassium (K)			<25		mg/kg		25	02-APR-12
Rubidium (Rb)			<0.020		mg/kg		0.02	02-APR-12
Selenium (Se)			<0.50		mg/kg		0.5	02-APR-12
Silver (Ag)			<0.10		mg/kg		0.1	02-APR-12
Sodium (Na)			<10		mg/kg		10	02-APR-12
Strontium (Sr)			<0.10		mg/kg		0.1	02-APR-12
Tellurium (Te)			<0.10		mg/kg		0.1	02-APR-12
Thallium (Tl)			<0.10		mg/kg		0.1	02-APR-12
Tin (Sn)			<5.0		mg/kg		5	02-APR-12
Titanium (Ti)			<0.50		mg/kg		0.5	02-APR-12
Tungsten (W)			<0.050		mg/kg		0.05	02-APR-12
Uranium (U)			<0.020		mg/kg		0.02	02-APR-12
Vanadium (V)			<0.50		mg/kg		0.5	02-APR-12
Zinc (Zn)			<10		mg/kg		10	02-APR-12
Zirconium (Zr)			<0.10		mg/kg		0.1	02-APR-12
MOISTURE-WP	**Soil**							
Batch R2344793								
WG1450474-1 DUP		**L1128718-16**						
PAH,PANH-WP	**Soil**							
Batch R2346963								
WG1452344-3 DUP		**L1128718-16**						
1-Methyl Naphthalene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
2-Methyl Naphthalene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Acenaphthene		<0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	03-APR-12
Acenaphthylene		<0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	03-APR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2346963								
WG1452344-3 DUP		**L1128718-16**						
Acridine		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Anthracene		<0.0040	<0.0040	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(a)anthracene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(a)pyrene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(b)fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(b&j)fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(g,h,i)perylene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Benzo(k)fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Chrysene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Dibenzo(a,h)anthracene		<0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	03-APR-12
Fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Fluorene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Indeno(1,2,3-cd)pyrene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Naphthalene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Phenanthrene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Pyrene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
Quinoline		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	03-APR-12
WG1452344-2 LCS								
1-Methyl Naphthalene			98.7		%		60-130	03-APR-12
2-Methyl Naphthalene			77.5		%		60-130	03-APR-12
Acenaphthene			85.3		%		60-130	03-APR-12
Acenaphthylene			84.1		%		60-130	03-APR-12
Acridine			80.3		%		60-130	03-APR-12
Anthracene			86.8		%		60-130	03-APR-12
Benzo(a)anthracene			80.9		%		60-130	03-APR-12
Benzo(a)pyrene			97.1		%		60-130	03-APR-12
Benzo(b)fluoranthene			94.1		%		60-130	03-APR-12
Benzo(b&j)fluoranthene			95.4		%		60-130	03-APR-12
Benzo(g,h,i)perylene			93.6		%		60-130	03-APR-12
Benzo(k)fluoranthene			85.2		%		60-130	03-APR-12
Chrysene			88.8		%		60-130	03-APR-12
Dibenzo(a,h)anthracene			104.3		%		60-130	03-APR-12
Fluoranthene			88.8		%		60-130	03-APR-12
Fluorene			82.8		%		60-130	03-APR-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH,PANH-WP	**Soil**							
Batch R2346963								
WG1452344-2 LCS								
Indeno(1,2,3-cd)pyrene			114.6		%		60-130	03-APR-12
Naphthalene			69.0		%		50-130	03-APR-12
Phenanthrene			93.5		%		60-130	03-APR-12
Pyrene			88.4		%		60-130	03-APR-12
Quinoline			73.9		%		60-130	03-APR-12
WG1452344-1 MB								
1-Methyl Naphthalene			<0.010		mg/kg		0.01	03-APR-12
2-Methyl Naphthalene			<0.010		mg/kg		0.01	03-APR-12
Acenaphthene			<0.0050		mg/kg		0.005	03-APR-12
Acenaphthylene			<0.0050		mg/kg		0.005	03-APR-12
Acridine			<0.010		mg/kg		0.01	03-APR-12
Anthracene			<0.0040		mg/kg		0.004	03-APR-12
Benzo(a)anthracene			<0.010		mg/kg		0.01	03-APR-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	03-APR-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	03-APR-12
Benzo(b&j)fluoranthene			<0.010		mg/kg		0.01	03-APR-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	03-APR-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	03-APR-12
Chrysene			<0.010		mg/kg		0.01	03-APR-12
Dibenzo(a,h)anthracene			<0.0050		mg/kg		0.005	03-APR-12
Fluoranthene			<0.010		mg/kg		0.01	03-APR-12
Fluorene			<0.010		mg/kg		0.01	03-APR-12
Indeno(1,2,3-cd)pyrene			<0.010		mg/kg		0.01	03-APR-12
Naphthalene			<0.010		mg/kg		0.01	03-APR-12
Phenanthrene			<0.010		mg/kg		0.01	03-APR-12
Pyrene			<0.010		mg/kg		0.01	03-APR-12
Quinoline			<0.010		mg/kg		0.01	03-APR-12
Surrogate: Acenaphthene d10			74.8		%		50-150	03-APR-12
Surrogate: Chrysene d12			69.0		%		50-150	03-APR-12
Surrogate: Naphthalene d8			59.1		%		50-150	03-APR-12
Surrogate: Phenanthrene d10			87.6		%		50-150	03-APR-12

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

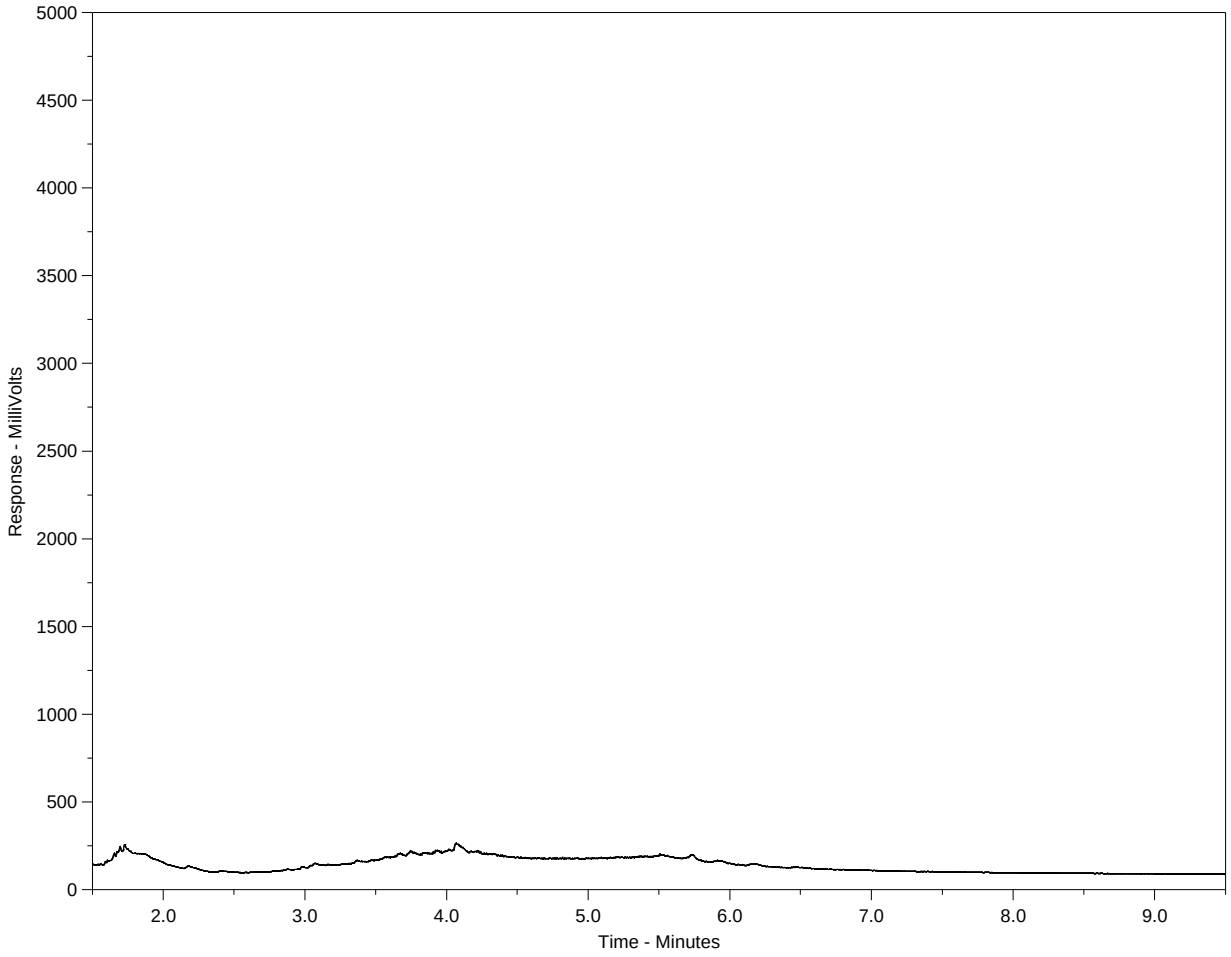
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128718-13**
Client ID: **PL COMP S2**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

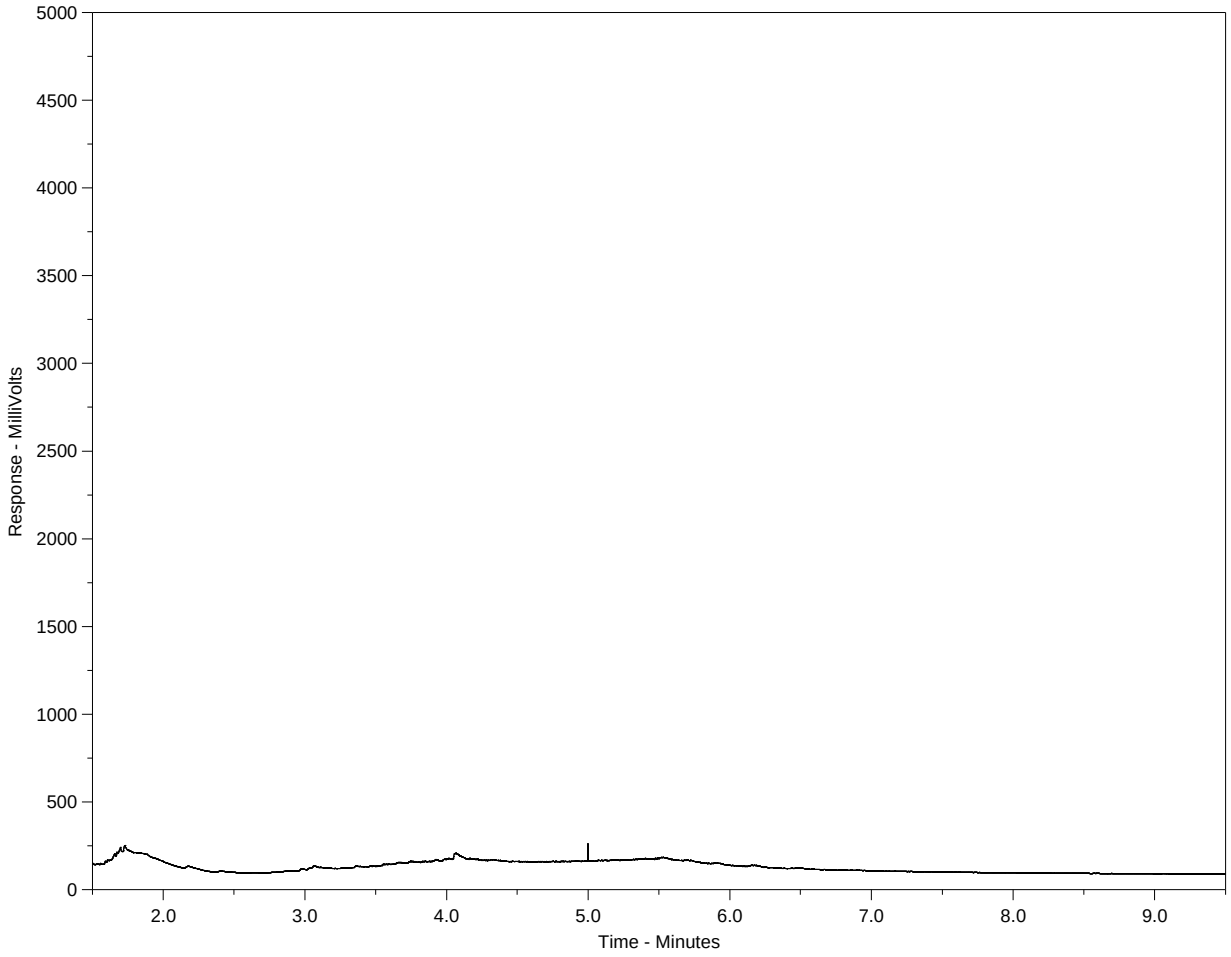
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128718-14**
Client ID: **PL COMP S5**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

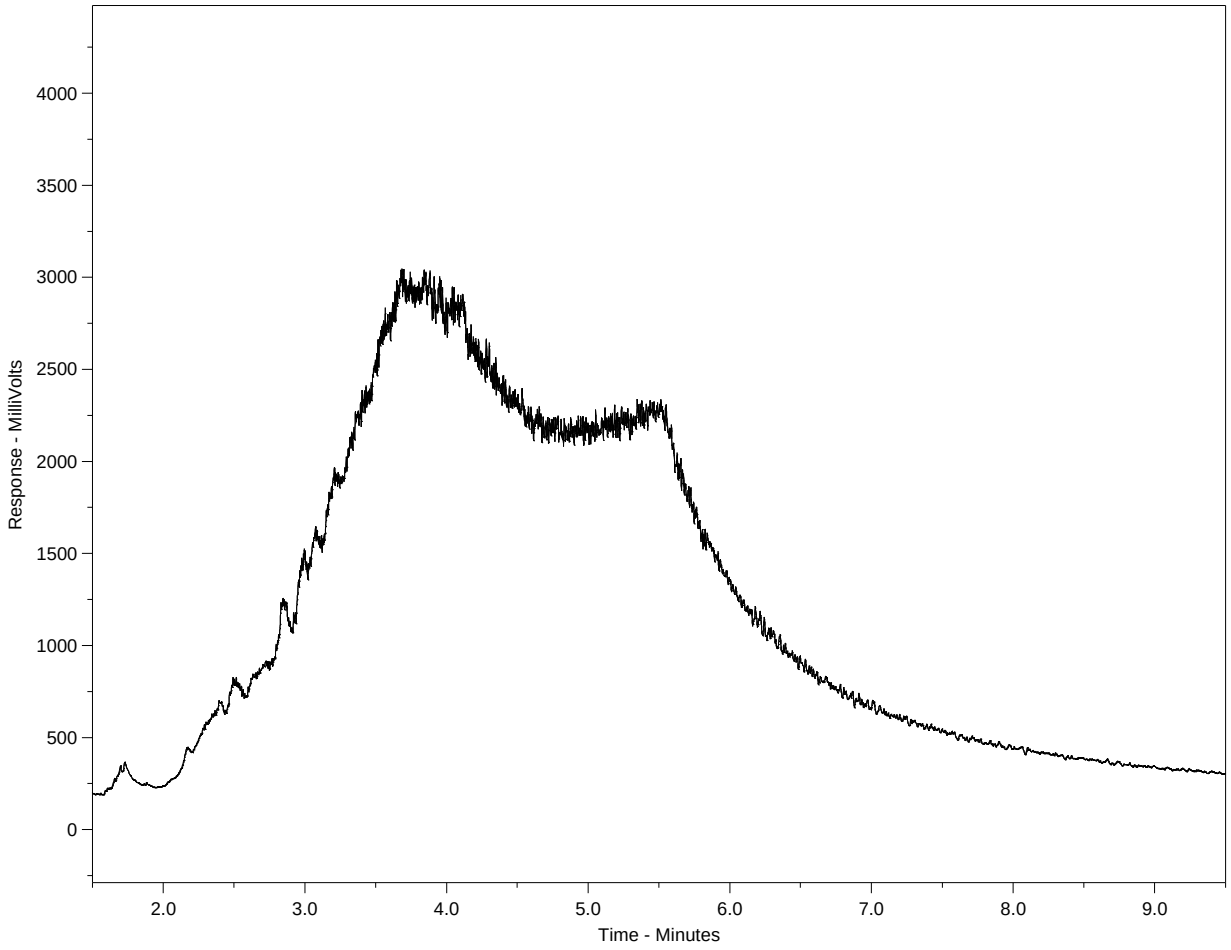
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128718-15**
Client ID: **WENZEL COMP S4**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11---------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

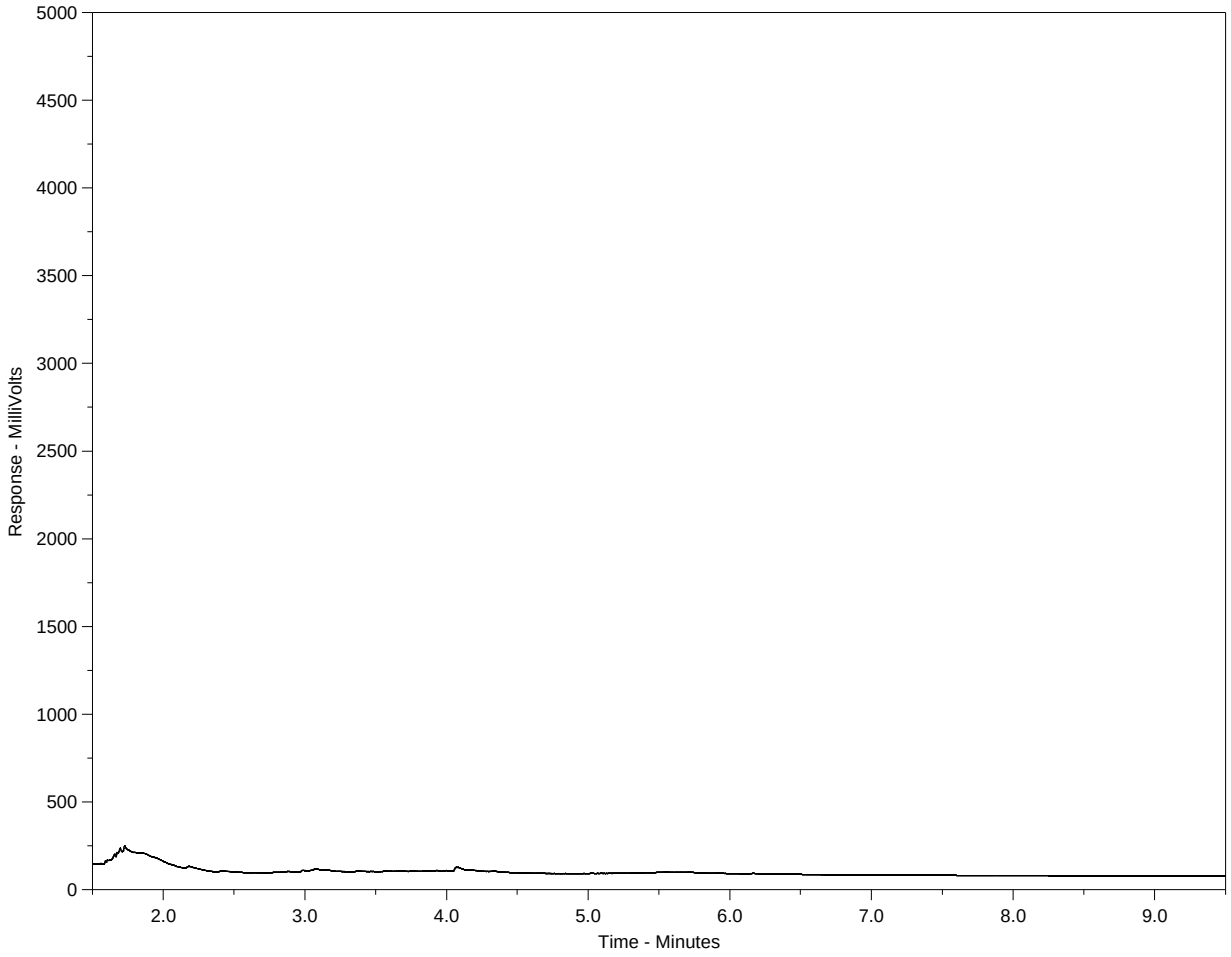
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: **L1128718-16**
Client ID: **WENZEL COMP S1**



<-nC10---------nC16------------------------nC34-----------------nC50------------------------------>
<-------nC11----------------------nC30-->
<----Gasoline-------------> <------------------Heavy Oils-->
|--------------Diesel----------------|

The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

L1128718

10-023342

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L1128718-COFC

Report To		**Distribution**	**Service Requested:** (Rush subject to availability)
Company:	KGS Group	Other (specify):	X Regular (Standard Turnaround Times))
Contact:	Rob Sinclair	Select: PDF X Excel X Digital Fax	Priority, Date Req'd: (Surcharges apply)
Address:	865 Waverley St	Email 1: RSinclair@KGSGroup.com	Emergency (1 Business Day) - 100% Surcharge
		Email 2: LAnds@KGSGroup.com	For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	896-1209 Fax: 896-0754		**Analysis Request**
Invoice To	Same as Report ? (circle) Yes or No (if No, provide details)	**Client / Project Information**	(Indicate Filtered or Preserved, F/P)
	Copy of Invoice with Report? (circle) Yes or No	Job #: ~~Enviro~~ Elmwood LANDFILL	
Company:	KGS Group	PO / AFE:	
Contact:	Bill Mugguirre	LSD:	
Address:	865 Waverley St		
Phone:	896-1209 Fax: 896-0754	Quote #:	
Lab Work Order # (lab use only)		**ALS Contact:**	**Sampler:**

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Metals	Number of Containers
	PL Comp S1	Mar 28	1000	BAG	X	1
	PL Comp S2		1015		X	1
	PL Comp S3		1030		X	1
	PL Comp S4		1045		X	1
	PL Comp S5		1100		X	1
	PL Comp S6		1115		X	1
	Wenzel Comp S1		1200		X	1
	Wenzel Comp S2		1215		X	1
	Wenzel Comp S3		1230		X	1
	Wenzel Comp S4		1245		X	1
	Wenzel Comp S5		1300		X	1
	Wenzel Comp S6		1315		X	1

Special Instructions / Regulations / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				28 MAR 12	14:10	13 °C				

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ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

Chain of Custody / Analytical Request Form

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10-023344

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Report To	Format / Distribution	Service Requested: (Rush subject to availability)
Company:	Other (specify):	X Regular (Standard Turnaround Times))
Contact:	PDF Excel Digital Fax	Priority, Date Req'd: _____ (Surcharges apply)
Address:		Emergency (1 Business Day) - 100% Surcharge
		For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone: Fax:		

Invoice To	Same as Report ? (circle) Yes or No (if No, provide details)	Client / Project Information
	Copy of Invoice with Report? (circle) Yes or No	Job #:
Company:		PO / AFE:
Contact:		LSD:
Address:		
Phone:	Fax:	Quote #:

Lab Work Order # (lab use only)		ALS Contact:	Sampler:

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Analysis Request (Indicate Filtered or Preserved, F/P) BTEX	F1 - F4	PAH	Number of Containers
	PL Comp S2	Mar 12	1015	Jar	X	X	X	3
	PL Comp S5		1100	Jar	X	X	X	3
	Wenzel Comp S4		1245	Jar	X	X	X	3
	Wenzel Comp S1		1000	Jar	X	X	X	3

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				12MAR12	14:10	13 °C				

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