Nov 20, 2013

Robert Price
PWGSC
401-1230 Government St.
Victoria, BC V8W 3X4

SLR Project No.: 205.03633.00000

Dear Mr. Price,

RE: COL-12 SOIL STOCKPILES, DND COLWOOD, COLWOOD, BC

At the request of Public Works and Government Services Canada (PWGSC), SLR Consulting (Canada) Ltd. (SLR) prepared this letter outlining the amount and quality of soil temporarily stored at the COL-12 site at DND Colwood, Colwood, BC.

BACKGROUND

In March, 2013, PWGSC remediated the COL-18 site at DND Colwood. Excavated soils were stockpiled at COL-12 for analytical testing and temporary storage. Approximately 6,143 tonnes of soil from the COL-18 remediation was disposed of offsite.

As part of a water line upgrade project in August, 2013, PWGSC excavated soils from Belmont Park, DND Colwood. Excavated soils were stockpiled at COL-12 for analytical testing and temporary storage. None of the soil from Belmont Park has been disposed of offsite.

The remaining soil from COL-18 and Belmont Park have been consolidated at COL-12 into four superpiles consisting of two soil quality types.

In July through September, 2013, PWGSC remediated the COL-43 site at DND Colwood. Excavated soils were stockpiled at COL-12 for analytical testing and temporary storage. Approximately 8,800 tonnes of soil from the COL-43 remediation was disposed of offsite.

The remaining soil from COL-43 is at COL-12 in sixty-eight stockpiles and one superpile of four soil quality types.

The stockpiled soil can be seen in Photographs 1 and 2.

APPLICABLE STANDARDS FOR OFF-SITE DISPOSAL

For off-site disposal, the following provincial Contaminated Sites Regulations (CSR) are referenced:

- Commercial Land Use, Groundwater flow to surface water used by Freshwater Aquatic Life (CSR CLfw); and
- Residential Land Use, Groundwater flow to surface water used by Freshwater Aquatic Life (CSR RLfw).

Please note that mandatory site-specific factors as per the BC CSR, that are applicable on all sites, were also referenced.

SOIL QUALITY

Drawing 1, showing stockpile locations and qualities of the soils at COL-12, is included after the letter.

Stockpile soil analytical results from COL-43 and Belmont Park are presented on the lab reports included after the letter.

The approximate tonnage for each soil quality compared to CSR standards, and the soil origin, is summarized on Table A, below.

Table A: Soil Summary

Soil Quality	Soil Weight (tonnes)	Stockpiles by Origin
Metals < CSR RL PAH < CSR RL	4,368	**COL-18:** SP13-22, 155, 157, 159-161, 166, 196, 201, 204-209, 214, 216, 222-227, 229, 230, 232, 233 **COL-43:** SP106, 107 **Belmont Park:** SP1-17
Metals > CSR RL PAH < CSR RL	100	**COL-43:** SP35
Metals > CSR CL PAH < CSR RL	6,100	**COL-43:** SP1, 5, 6, 7, 8, 9, 10, 11, 12, 23, 24, 25, 32, 33, 34, 36, 37, 59, 60, 61, 62, 63, 64, 65, 66, 67, , 91, 92, 93, 94, 95, 96, 97, 108, 109, 110, 111, 112, 113, 114, 115, 128, 129, 131, 132, 133
Metals > CSR CL **PAH > CSR RL**	15,428	**COL-18:** SP13-1-21, 23-154, 156, 158, 162-165, 167-195, 197-200, 210- 213, 215, 217-221, 228, 231, 234. **COL-43:** 82, 85, 86, 98, 99, 100, 101, 102, 103, 104, 116, 117, 118, 119, 121, 122, 123, 124, 125

Notes: Bold - indicates parameter exceeds applicable standard.

RECOMMENDATIONS

The middle of the site can get soft and muddy in wet conditions and therefore soil removal should be approached from the perimeter gravel road on the site. A view of the site gravel road and access from the main road can be seen in Photographs 2 and 3.

Stockpiles above the CSR CL standards, as outlined in Table A above, should be covered with minimum 6-mil polyethylene to minimize contaminated run-off to the COL-12 site and adjacent areas. Currently some of the COL-43 soils and none of the COL-18 soils are covered.

CLOSURE

We trust that this meets your current requirements. If you need any further information or require clarification o0n anything outlined in this report please feel free to contact the undersigned at (250) 475-9595.

Yours sincerely,

SLR Consulting (Canada) Ltd.

Chris Koziey, B.Sc., P.Ag.
Environmental Scientist

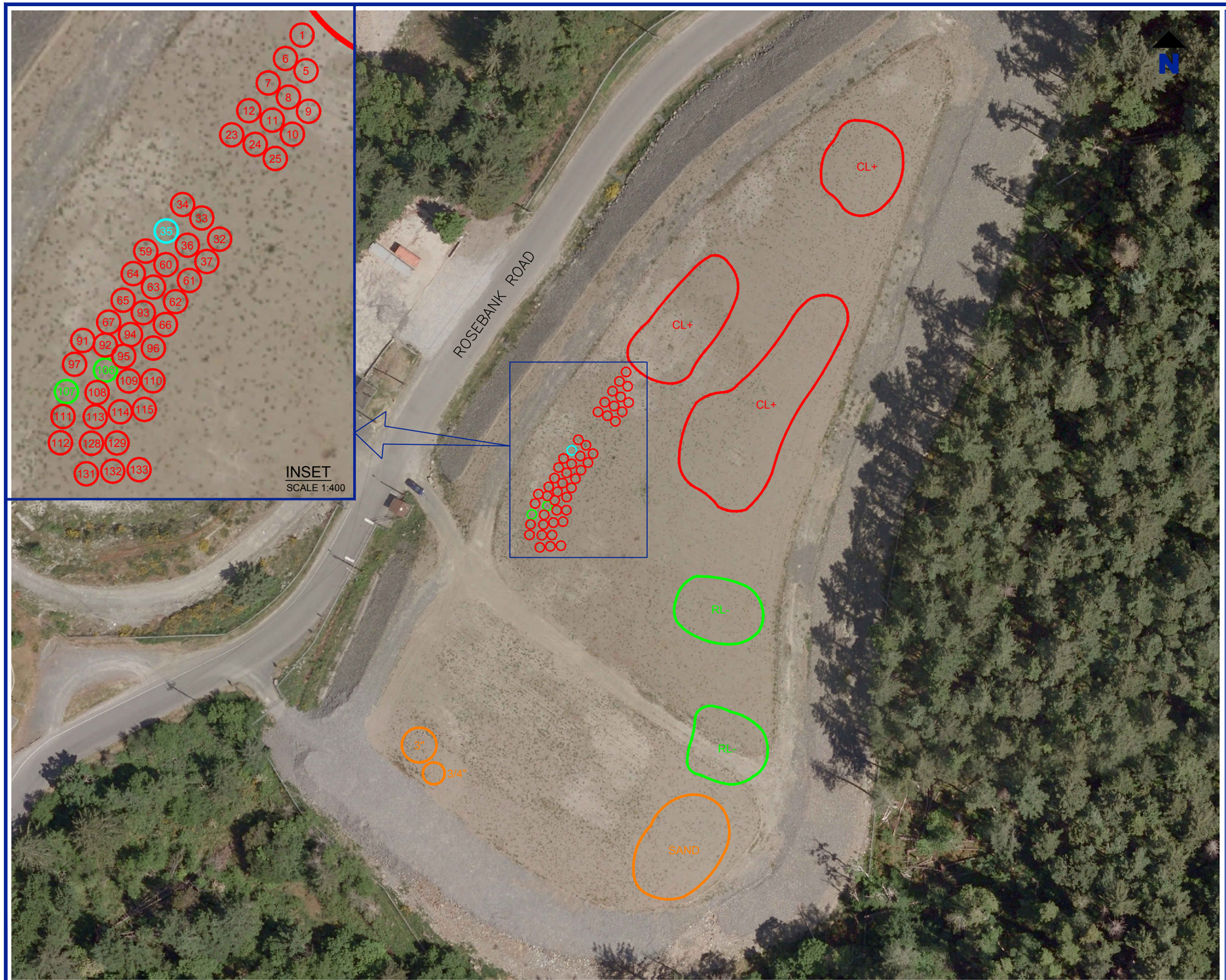
Aaron Haegele, B.Sc., A.Ag, P.Chem.
Senior Scientist

Enc Drawing 1

Photographs 1 through 4

Maxxam Laboratory Report B315776-R2013-03-06_17-17-18_R014
Maxxam Laboratory Report B316165-R2013-03-12_12-18-23_R014
Maxxam Laboratory Report B316601-R2013-03-14_18-35-51_R014
Maxxam Laboratory Report B317135-R2013-03-18_12-25-42_R014
Maxxam Laboratory Report B317896-R2013-03-21_18-00-48_R014
Maxxam Laboratory Report B318225-R2013-03-20_16-35-17_R014
Maxxam Laboratory Report B318611-R2013-03-21_12-00-54_R014
Maxxam Laboratory Report B318798-R2013-03-25_14-04-05_R014
Maxxam Laboratory Report B319341-R2013-03-20_18-34-29_R014
Maxxam Laboratory Report B319912-R2013-03-20_18-37-57_R014
Maxxam Laboratory Report B320232-R2013-03-21_16-58-43_R014
Maxxam Laboratory Report B320618-R2013-03-22_16-35-43_R014
Maxxam Laboratory Report B320914-R2013-03-20_17-55-51_R014
Maxxam Laboratory Report B323114-R2013-03-26_16-42-18_R014
Maxxam Laboratory Report B323383-R2013-03-27_15-43-48_R014
Maxxam Laboratory Report B361535-R2013-07-25_17-29-41_R014
Maxxam Laboratory Report B362197-R2013-07-26_18-16-38_R014
Maxxam Laboratory Report B364544-R2013-08-02_16-18-28_R014
Maxxam Laboratory Report B366663-R2013-08-09_16-10-39_R014
Maxxam Laboratory Report B367167-R2013-08-09_14-52-04_R014

ALS Laboratory Report L1192620
ALS Laboratory Report L1196150
ALS Laboratory Report L1199893



THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.

SCALE 1:1000
WHEN PLOTTED AT 11 x 17 PAGE SIZE
0 10 20 40 60 m

NOTES

LEGEND

- CONCENTRATIONS LESS THAN OR EQUAL TO CSR RESIDENTIAL STANDARDS
- CONCENTRATIONS GREATER THAN CSR RESIDENTIAL STANDARDS
- CONCENTRATIONS GREATER THAN CSR COMMERCIAL STANDARDS

PUBLIC WORKS AND GOVERNMENT SERVICES
DND COLWOOD
COLWOOD, BC

Report
COL-12 SOIL STOCKPILES

Drawing
STOCKPILED SOIL AT COL-12

Date October 2, 2013	Scale AS SHOWN	Drawing No. 1
File Name S_205-03633-00001-B1	Project No. 205.03633.00001	

SLR

Photograph 1: An aerial view of the COL-12 stockpile area, looking north.

Photograph 2: A view of one of the RL- stockpiles and the sand pile (not visible in the aerial photo, looking south.

Photograph 3: A view of the perimeter gravel road at the site, looking south.

Photograph 4: A view of the site access from Rosebank Road, looking west.

Maxxam

Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828 A013
Site Location: COLWOOD 18
Your C.O.C. #: F147121, F147122

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/06
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B315776
Received: 2013/02/28, 08:00

Sample Matrix: Soil
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/02/28	2013/02/28	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	16	2013/03/01	2013/03/01	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	16	2013/03/01	2013/03/01	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	2	N/A	2013/03/01	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	2	2013/02/28	2013/03/01	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	16	2013/03/01	2013/03/01	BBY7SOP-00001	EPA 6020A
Metals - TCLP	1	2013/03/05	2013/03/06	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	2	N/A	2013/03/01	BBY6SOP-00039	Carter SSMA 47.4
Moisture	16	N/A	2013/03/01	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	16	2013/02/28	2013/03/01	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	16	N/A	2013/03/01	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	16	N/A	2013/03/01	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	16	2013/03/01	2013/03/01	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	16	2013/03/01	2013/03/01	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	1	N/A	2013/03/06	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	16	N/A	2013/03/01		
Saturated Paste	16	2013/03/01	2013/03/01	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	16	N/A	2013/03/01		
Sulphate (soluble) (soil)	16	2013/03/01	2013/03/01	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	16	N/A	2013/03/01	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	2	N/A	2013/03/01	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	2	2013/02/28	2013/02/28	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	2	N/A	2013/03/01	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.
Total cover pages: 1

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FS8886	FS8897		
Sampling Date		2013/02/27	2013/02/27		
	UNITS	**SP13-09-130227**	**SP13-14-130227**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon					
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	19	10	6610325
F3 (C16-C34 Hydrocarbons)	mg/kg	42	100	10	6610325
F4 (C34-C50 Hydrocarbons)	mg/kg	28	44	10	6610325
Reached Baseline at C50	mg/kg	YES	YES	N/A	6610325
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	94	95		6610325

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FS8878	FS8884	FS8884		
Sampling Date		2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-01-130227**	**SP13-07-130227**	**SP13-07-130227 Lab-Dup**	**RDL**	**QC Batch**
Physical Properties						
200 mesh (>.075 mm)	%	57.0	58.4	59.4	0.10	6610755
200 mesh (<.075 mm)	%	43.0	41.6	40.6	0.10	6610755

PHYSICAL TESTING (SOIL)

Maxxam ID		FS8878	FS8879	FS8880	FS8881	FS8882	FS8882	FS8883		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-01-130227**	**SP13-02-130227**	**SP13-03-130227**	**SP13-04-130227**	**SP13-05-130227**	**SP13-05-130227 Lab-Dup**	**SP13-06-130227**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	11	15	17	18	18	18	19	0.30	6608202

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PHYSICAL TESTING (SOIL)

Maxxam ID		FS8884	FS8885	FS8886	FS8887	FS8888		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-07-130227**	**SP13-08-130227**	**SP13-09-130227**	**SP13-10-130227**	**SP13-10-01-130227**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	17	17	19	18	18	0.30	6608202

Maxxam ID		FS8889	FS8895	FS8896	FS8897	FS8898		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-11-130227**	**SP13-12-130227**	**SP13-13-130227**	**SP13-14-130227**	**SP13-15-130227**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	19	20	18	18	18	0.30	6608202

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FS8884	FS8884		
Sampling Date		2013/02/27	2013/02/27		
	UNITS	**SP13-07-130227**	**SP13-07-130227 Lab-Dup**	**RDL**	**QC Batch**
TCLP Extraction Procedure					
Initial pH of Sample	pH Units	7.78	7.88	N/A	6620503
pH after HCl	pH Units	1.63	1.63	N/A	6620503
Final pH of Leachate	pH Units	5.13	5.12	N/A	6620503
pH of Leaching Fluid	pH Units	4.95	4.95	N/A	6620503

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FS8886	FS8897	FS8897		
Sampling Date		2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-09-130227**	**SP13-14-130227**	**SP13-14-130227 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters						
LEPH (C10-C19 less PAH)	mg/kg	<100	<100		100	6608134
HEPH (C19-C32 less PAH)	mg/kg	105	124		100	6608134
Hydrocarbons						
EPH (C10-C19)	mg/kg	<100	<100	106	100	6609447
EPH (C19-C32)	mg/kg	105	126	229	100	6609447
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	85	88	87		6609447

RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FS8886	FS8897		
Sampling Date		2013/02/27	2013/02/27		
	UNITS	**SP13-09-130227**	**SP13-14-130227**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	6608165
Volatiles					
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	10	6608169
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	0.10	6609622
Benzene	mg/kg	<0.0050	<0.0050	0.0050	6609622
Toluene	mg/kg	<0.020	<0.020	0.020	6609622
Ethylbenzene	mg/kg	<0.010	<0.010	0.010	6609622
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	6609622
o-Xylene	mg/kg	<0.040	<0.040	0.040	6609622
Styrene	mg/kg	<0.030	<0.030	0.030	6609622
Xylenes (Total)	mg/kg	<0.040	<0.040	0.040	6609622
VH C6-C10	mg/kg	<10	<10	10	6609622
(C6-C10)	mg/kg	<10	<10	10	6609622
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	102	100		6609622
4-BROMOFLUOROBENZENE (sur.)	%	99	100		6609622
D10-ETHYLBENZENE (sur.)	%	102	100		6609622
D4-1,2-DICHLOROETHANE (sur.)	%	108	107		6609622

RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FS8878	FS8878	FS8879	FS8880	FS8881	FS8882		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-01-130227**	**SP13-01-130227 Lab-Dup**	**SP13-02-130227**	**SP13-03-130227**	**SP13-04-130227**	**SP13-05-130227**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.61	7.54	7.54	7.34	7.36	7.51	0.010	6610050
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	23500	23300	21000	22200	21500	22000	100	6609951
Total Antimony (Sb)	mg/kg	19.7	19.9	19.5	17.1	18.7	14.7	0.10	6609951
Total Arsenic (As)	mg/kg	43.6	43.9	36.0	32.0	40.5	33.5	0.50	6609951
Total Barium (Ba)	mg/kg	103	103	94.1	98.1	98.3	99.2	0.10	6609951
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	6609951
Total Bismuth (Bi)	mg/kg	0.20	0.19	0.17	0.16	0.30	0.19	0.10	6609951
Total Cadmium (Cd)	mg/kg	0.358	0.311	0.260	0.291	0.415	0.346	0.050	6609951
Total Calcium (Ca)	mg/kg	11300	11200	8020	6340	7050	8740	100	6609951
Total Chromium (Cr)	mg/kg	37.0	36.2	34.5	36.6	34.7	36.7	1.0	6609951
Total Cobalt (Co)	mg/kg	13.8	13.7	13.1	13.2	18.9	13.0	0.30	6609951
Total Copper (Cu)	mg/kg	120	121	86.4	78.6	120	89.7	0.50	6609951
Total Iron (Fe)	mg/kg	31600	31400	29000	29500	30000	30000	100	6609951
Total Lead (Pb)	mg/kg	54.8	55.4	58.8	55.7	48.9	43.7	0.10	6609951
Total Lithium (Li)	mg/kg	13.6	14.1	12.6	13.4	12.6	14.1	5.0	6609951
Total Magnesium (Mg)	mg/kg	7590	7580	7390	7370	7360	7340	100	6609951
Total Manganese (Mn)	mg/kg	611	593	587	560	642	579	0.20	6609951
Total Mercury (Hg)	mg/kg	0.110	0.125	0.127	0.105	0.117	0.119	0.050	6609951
Total Molybdenum (Mo)	mg/kg	2.44	2.47	2.51	1.76	2.78	2.50	0.10	6609951
Total Nickel (Ni)	mg/kg	28.4	29.1	26.5	28.1	26.8	27.3	0.80	6609951
Total Phosphorus (P)	mg/kg	660	648	646	574	652	636	10	6609951
Total Potassium (K)	mg/kg	913	913	754	710	733	802	100	6609951
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6609951
Total Silver (Ag)	mg/kg	0.115	0.122	0.096	0.125	0.162	0.110	0.050	6609951
Total Sodium (Na)	mg/kg	262	250	215	199	195	211	100	6609951
Total Strontium (Sr)	mg/kg	54.2	54.6	44.0	44.1	43.2	44.2	0.10	6609951
Total Thallium (Tl)	mg/kg	0.059	0.056	<0.050	<0.050	<0.050	0.053	0.050	6609951
Total Tin (Sn)	mg/kg	4.23	4.23	3.64	3.58	5.50	2.97	0.10	6609951
Total Titanium (Ti)	mg/kg	1160	1150	938	913	991	1020	1.0	6609951
Total Uranium (U)	mg/kg	0.753	0.748	0.588	0.553	0.630	0.629	0.050	6609951
Total Vanadium (V)	mg/kg	76.5	74.9	69.9	73.1	72.5	72.6	2.0	6609951
Total Zinc (Zn)	mg/kg	343	346	269	211	309	270	1.0	6609951
Total Zirconium (Zr)	mg/kg	3.23	3.22	2.57	3.20	2.69	2.81	0.50	6609951

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FS8883	FS8884	FS8885	FS8886	FS8887	FS8888		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-06-130227**	**SP13-07-130227**	**SP13-08-130227**	**SP13-09-130227**	**SP13-10-130227**	**SP13-10-01-130227**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.58	7.51	7.47	7.51	7.43	7.57	0.010	6610050
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21800	21300	23200	22500	22800	22200	100	6609951
Total Antimony (Sb)	mg/kg	21.8	40.6	13.0	46.4	15.8	14.1	0.10	6609951
Total Arsenic (As)	mg/kg	60.7	79.4	26.7	74.5	35.0	32.4	0.50	6609951
Total Barium (Ba)	mg/kg	107	105	101	107	110	108	0.10	6609951
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	6609951
Total Bismuth (Bi)	mg/kg	0.40	0.27	0.14	0.27	0.18	0.21	0.10	6609951
Total Cadmium (Cd)	mg/kg	0.582	0.368	0.275	0.365	0.306	0.366	0.050	6609951
Total Calcium (Ca)	mg/kg	8590	8590	9010	7550	7800	8840	100	6609951
Total Chromium (Cr)	mg/kg	38.0	40.6	37.7	36.4	41.8	45.7	1.0	6609951
Total Cobalt (Co)	mg/kg	13.5	14.8	14.0	14.8	12.9	13.5	0.30	6609951
Total Copper (Cu)	mg/kg	127	125	80.2	111	84.8	92.4	0.50	6609951
Total Iron (Fe)	mg/kg	30500	30600	30900	31700	29000	31200	100	6609951
Total Lead (Pb)	mg/kg	63.8	87.6	46.5	84.9	44.6	51.5	0.10	6609951
Total Lithium (Li)	mg/kg	13.4	13.0	14.0	13.7	13.5	13.3	5.0	6609951
Total Magnesium (Mg)	mg/kg	7150	6960	7460	8230	7030	7350	100	6609951
Total Manganese (Mn)	mg/kg	733	604	708	613	618	657	0.20	6609951
Total Mercury (Hg)	mg/kg	0.122	0.143	0.121	0.168	0.114	0.123	0.050	6609951
Total Molybdenum (Mo)	mg/kg	3.18	4.89	1.96	4.36	2.15	2.61	0.10	6609951
Total Nickel (Ni)	mg/kg	49.6	28.6	28.2	28.6	29.9	29.7	0.80	6609951
Total Phosphorus (P)	mg/kg	638	656	832	653	609	648	10	6609951
Total Potassium (K)	mg/kg	847	785	773	784	803	789	100	6609951
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6609951
Total Silver (Ag)	mg/kg	0.126	0.174	0.094	0.180	0.103	0.116	0.050	6609951
Total Sodium (Na)	mg/kg	251	246	222	275	187	203	100	6609951
Total Strontium (Sr)	mg/kg	48.2	49.4	50.5	42.9	45.1	44.5	0.10	6609951
Total Thallium (Tl)	mg/kg	0.066	0.072	0.050	0.065	0.065	<0.050	0.050	6609951
Total Tin (Sn)	mg/kg	4.86	8.70	2.80	11.6	3.05	3.34	0.10	6609951
Total Titanium (Ti)	mg/kg	960	914	967	954	956	1050	1.0	6609951
Total Uranium (U)	mg/kg	0.843	0.710	0.601	0.644	0.671	0.614	0.050	6609951
Total Vanadium (V)	mg/kg	71.9	73.7	73.9	73.4	71.7	73.8	2.0	6609951
Total Zinc (Zn)	mg/kg	434	440	220	419	247	270	1.0	6609951
Total Zirconium (Zr)	mg/kg	2.67	2.81	2.76	2.80	3.10	3.27	0.50	6609951

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FS8889	FS8895	FS8896	FS8897	FS8898		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-11-130227**	**SP13-12-130227**	**SP13-13-130227**	**SP13-14-130227**	**SP13-15-130227**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.53	7.43	7.39	7.74	7.34	0.010	6610050
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	22800	23200	21700	22100	24500	100	6609951
Total Antimony (Sb)	mg/kg	20.5	10.5	19.9	19.4	5.82	0.10	6609951
Total Arsenic (As)	mg/kg	50.2	29.1	46.9	48.3	15.7	0.50	6609951
Total Barium (Ba)	mg/kg	115	109	100	108	113	0.10	6609951
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	6609951
Total Bismuth (Bi)	mg/kg	0.25	0.20	0.22	0.29	0.11	0.10	6609951
Total Cadmium (Cd)	mg/kg	0.487	0.357	0.334	0.467	0.232	0.050	6609951
Total Calcium (Ca)	mg/kg	8020	7400	11800	9760	6820	100	6609951
Total Chromium (Cr)	mg/kg	36.1	38.1	33.6	42.3	39.4	1.0	6609951
Total Cobalt (Co)	mg/kg	13.9	13.7	13.8	13.8	13.9	0.30	6609951
Total Copper (Cu)	mg/kg	100	87.2	82.8	185	61.3	0.50	6609951
Total Iron (Fe)	mg/kg	31100	31000	28500	31100	30500	100	6609951
Total Lead (Pb)	mg/kg	62.6	42.7	48.4	77.0	26.4	0.10	6609951
Total Lithium (Li)	mg/kg	14.0	13.9	13.1	12.9	14.5	5.0	6609951
Total Magnesium (Mg)	mg/kg	7230	7600	6850	7460	8040	100	6609951
Total Manganese (Mn)	mg/kg	692	662	602	679	643	0.20	6609951
Total Mercury (Hg)	mg/kg	0.104	0.150	0.119	0.765	0.083	0.050	6609951
Total Molybdenum (Mo)	mg/kg	3.24	2.39	3.57	5.01	1.25	0.10	6609951
Total Nickel (Ni)	mg/kg	28.6	29.4	28.0	29.7	29.6	0.80	6609951
Total Phosphorus (P)	mg/kg	651	685	654	646	683	10	6609951
Total Potassium (K)	mg/kg	812	844	745	749	840	100	6609951
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6609951
Total Silver (Ag)	mg/kg	0.124	0.102	0.135	0.142	0.065	0.050	6609951
Total Sodium (Na)	mg/kg	208	170	212	263	162	100	6609951
Total Strontium (Sr)	mg/kg	49.7	42.8	47.3	64.7	45.6	0.10	6609951
Total Thallium (Tl)	mg/kg	0.062	0.061	<0.050	0.061	<0.050	0.050	6609951
Total Tin (Sn)	mg/kg	7.90	2.74	3.80	5.06	2.19	0.10	6609951
Total Titanium (Ti)	mg/kg	961	982	918	990	1060	1.0	6609951
Total Uranium (U)	mg/kg	0.761	0.674	0.596	0.913	0.538	0.050	6609951
Total Vanadium (V)	mg/kg	72.8	74.9	69.0	74.0	79.9	2.0	6609951
Total Zinc (Zn)	mg/kg	376	280	263	446	156	1.0	6609951
Total Zirconium (Zr)	mg/kg	2.95	3.06	2.96	3.03	3.49	0.50	6609951

RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TCLP METALS (SOIL)

Maxxam ID		FS8884	FS8884		
Sampling Date		2013/02/27	2013/02/27		
	UNITS	**SP13-07-130227**	**SP13-07-130227 Lab-Dup**	**RDL**	**QC Batch**
Metals					
LEACHATE Arsenic (As)	mg/L	<0.10	<0.10	0.10	6625127

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FS8878	FS8879	FS8880	FS8881	FS8882	FS8883		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-01-130227**	**SP13-02-130227**	**SP13-03-130227**	**SP13-04-130227**	**SP13-05-130227**	**SP13-06-130227**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.9	1.3	1.2	1.2	1.3	1.9	0.10	6607511
Benzo[a]pyrene equivalency	N/A	0.16	0.12	0.11	0.11	0.12	0.17	0.10	6607511
Polycyclic Aromatics									
Naphthalene	mg/kg	0.027	0.015	0.021	<0.010	0.012	0.015	0.010	6609367
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6609367
Acenaphthylene	mg/kg	0.016	0.011	0.012	0.011	0.012	0.015	0.0050	6609367
Acenaphthene	mg/kg	0.029	0.012	0.011	0.017	0.0099	0.020	0.0050	6609367
Fluorene	mg/kg	0.027	<0.020	<0.020	0.021	<0.020	0.021	0.020	6609367
Phenanthrene	mg/kg	0.15	0.069	0.069	0.14	0.074	0.14	0.020	6609367
Anthracene	mg/kg	0.042	0.018	0.015	0.027	0.018	0.041	0.0040	6609367
Fluoranthene	mg/kg	0.21	0.12	0.12	0.16	0.14	0.21	0.020	6609367
Pyrene	mg/kg	0.21	0.13	0.12	0.15	0.14	0.21	0.020	6609367
Benzo(a)anthracene	mg/kg	0.090	0.057	0.050	0.048	0.060	0.092	0.020	6609367
Chrysene	mg/kg	0.11	0.075	0.068	0.070	0.078	0.11	0.020	6609367
Benzo(b&j)fluoranthene	mg/kg	0.13	0.090	0.084	0.087	0.089	0.13	0.020	6609367
Benzo(k)fluoranthene	mg/kg	0.048	0.032	0.029	0.032	0.036	0.047	0.020	6609367
Benzo(a)pyrene	mg/kg	0.10	0.070	0.061	0.065	0.071	0.11	0.020	6609367
Indeno(1,2,3-cd)pyrene	mg/kg	0.064	<0.050	<0.050	<0.050	<0.050	0.063	0.050	6609367
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6609367
Benzo(g,h,i)perylene	mg/kg	0.073	<0.050	<0.050	0.052	<0.050	0.071	0.050	6609367
Low Molecular Weight PAH`s	mg/kg	0.29	0.13	0.13	0.22	0.13	0.26	0.050	6607512
High Molecular Weight PAH`s	mg/kg	1.1	0.63	0.58	0.72	0.66	1.1	0.050	6607512
Total PAH	mg/kg	1.4	0.75	0.71	0.93	0.79	1.4	0.050	6607512
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	83	81	89	87	74	85		6609367
D8-ACENAPHTHYLENE (sur.)	%	80	82	88	84	75	83		6609367
D8-NAPHTHALENE (sur.)	%	81	81	87	84	75	83		6609367
TERPHENYL-D14 (sur.)	%	90	92	101	95	83	94		6609367

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FS8884	FS8885	FS8886	FS8887	FS8888	FS8889		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-07-130227**	**SP13-08-130227**	**SP13-09-130227**	**SP13-10-130227**	**SP13-10-01-130227**	**SP13-11-130227**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.8	3.1	1.5	1.5	1.7	3.2	0.10	6607511
Benzo[a]pyrene equivalency	N/A	0.16	0.25	0.14	0.13	0.14	0.27	0.10	6607511
Polycyclic Aromatics									
Naphthalene	mg/kg	0.016	0.017	0.013	0.012	0.012	<0.010	0.010	6609367
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6609367
Acenaphthylene	mg/kg	0.018	0.018	0.015	0.015	0.018	0.039	0.0050	6609367
Acenaphthene	mg/kg	0.013	0.015	0.013	0.011	0.013	0.0093	0.0050	6609367
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.035	0.020	6609367
Phenanthrene	mg/kg	0.088	0.13	0.083	0.085	0.11	0.27	0.020	6609367
Anthracene	mg/kg	0.025	0.038	0.024	0.025	0.025	0.070	0.0040	6609367
Fluoranthene	mg/kg	0.17	0.22	0.15	0.16	0.29	0.44	0.020	6609367
Pyrene	mg/kg	0.18	0.23	0.15	0.16	0.24	0.41	0.020	6609367
Benzo(a)anthracene	mg/kg	0.079	0.13	0.067	0.074	0.075	0.19	0.020	6609367
Chrysene	mg/kg	0.099	0.20	0.088	0.092	0.13	0.20	0.020	6609367
Benzo(b&j)fluoranthene	mg/kg	0.14	0.23	0.11	0.099	0.13	0.23	0.020	6609367
Benzo(k)fluoranthene	mg/kg	0.039	0.078	0.041	0.038	0.043	0.077	0.020	6609367
Benzo(a)pyrene	mg/kg	0.10	0.17	0.084	0.081	0.083	0.18	0.020	6609367
Indeno(1,2,3-cd)pyrene	mg/kg	0.062	0.093	0.050	0.057	<0.050	0.10	0.050	6609367
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6609367
Benzo(g,h,i)perylene	mg/kg	0.069	0.092	0.051	0.063	0.054	0.11	0.050	6609367
Low Molecular Weight PAH`s	mg/kg	0.16	0.21	0.15	0.15	0.17	0.43	0.050	6607512
High Molecular Weight PAH`s	mg/kg	1.0	1.6	0.85	0.88	1.1	2.1	0.050	6607512
Total PAH	mg/kg	1.2	1.8	1.0	1.0	1.3	2.5	0.050	6607512
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	87	90	83	94	84	81		6609367
D8-ACENAPHTHYLENE (sur.)	%	84	88	81	87	83	76		6609367
D8-NAPHTHALENE (sur.)	%	90	88	81	87	84	75		6609367
TERPHENYL-D14 (sur.)	%	95	99	91	101	92	87		6609367

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FS8895	FS8896	FS8897	FS8897	FS8898		
Sampling Date		2013/02/27	2013/02/27	2013/02/27	2013/02/27	2013/02/27		
	UNITS	**SP13-12-130227**	**SP13-13-130227**	**SP13-14-130227**	**SP13-14-130227 Lab-Dup**	**SP13-15-130227**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	1.4	1.6	7.3		0.31	0.10	6607511
Benzo[a]pyrene equivalency	N/A	0.13	0.14	0.63		<0.10	0.10	6607511
Polycyclic Aromatics								
Naphthalene	mg/kg	0.038	0.010	0.12	0.14	<0.010	0.010	6609367
2-Methylnaphthalene	mg/kg	<0.020	<0.020	0.12(1)	0.40(2)	<0.020	0.020	6609367
Acenaphthylene	mg/kg	0.012	0.016	0.049(1)	0.024	<0.0050	0.0050	6609367
Acenaphthene	mg/kg	0.010	0.0077	0.048	0.065	<0.0050	0.0050	6609367
Fluorene	mg/kg	<0.020	<0.020	0.055	0.079	<0.020	0.020	6609367
Phenanthrene	mg/kg	0.14	0.10	0.33	0.26	<0.020	0.020	6609367
Anthracene	mg/kg	0.019	0.021	0.11(1)	0.063(2)	<0.0040	0.0040	6609367
Fluoranthene	mg/kg	0.18	0.19	0.83(1)	0.33(2)	<0.020	0.020	6609367
Pyrene	mg/kg	0.20	0.18	0.78(1)	0.37(2)	<0.020	0.020	6609367
Benzo(a)anthracene	mg/kg	0.062	0.074	0.40(1)	0.14(2)	<0.020	0.020	6609367
Chrysene	mg/kg	0.094	0.096	0.46(1)	0.21(2)	<0.020	0.020	6609367
Benzo(b&j)fluoranthene	mg/kg	0.097	0.11	0.50(1)	0.21(2)	<0.020	0.020	6609367
Benzo(k)fluoranthene	mg/kg	0.036	0.043	0.19(1)	0.068	<0.020	0.020	6609367
Benzo(a)pyrene	mg/kg	0.078	0.088	0.42(1)	0.16(2)	<0.020	0.020	6609367
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.052	0.23	0.095	<0.050	0.050	6609367
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	0.066	<0.050	<0.050	0.050	6609367
Benzo(g,h,i)perylene	mg/kg	0.060	0.057	0.23	0.10	<0.050	0.050	6609367
Low Molecular Weight PAH`s	mg/kg	0.22	0.16	0.83		<0.050	0.050	6607512
High Molecular Weight PAH`s	mg/kg	0.86	0.95	4.4		<0.050	0.050	6607512
Total PAH	mg/kg	1.1	1.1	5.2		<0.050	0.050	6607512
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	85	94	86	87	92		6609367
D8-ACENAPHTHYLENE (sur.)	%	85	85	84	81	81		6609367
D8-NAPHTHALENE (sur.)	%	83	84	84	81	81		6609367
TERPHENYL-D14 (sur.)	%	94	98	93	93	95		6609367

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit due to sample non homogeneity. Increased variability of results
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam

Success Through Science®

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FS8878		FS8879		FS8880		FS8881	FS8882		
Sampling Date		2013/02/27		2013/02/27		2013/02/27		2013/02/27	2013/02/27		
	UNITS	**SP13-01-130227**	**RDL**	**SP13-02-130227**	**RDL**	**SP13-03-130227**	**RDL**	**SP13-04-130227**	**SP13-05-130227**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	<10	10	<10	10	<10	10	<10	<10	10	6612566
Soluble Chloride (Cl)	mg/L	29.7	5.0	23.6	5.0	19.4	5.0	19.6	22.9	5.0	6612565
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	14.6	2.5	11.0	2.3	9.8	2.5	10.1	12.1	2.6	6608168
Soluble Sodium (Na)	mg/kg	10.7	2.5	8.9	2.3	8.6	2.5	7.4	9.0	2.6	6608168
Soluble Parameters											
Soluble Conductivity	uS/cm	327	1.0	314	1.0	252	1.0	272	313	1.0	6610110
Soluble pH	pH Units	7.07	N/A	7.36	N/A	7.24	N/A	7.42	7.12	N/A	6610108
Wet Soluble Calcium (Ca)	mg/L	52.5	5.0	52.9	5.0	39.6	5.0	46.1	53.0	5.0	6611473
Saturation %	%	49.2	1.0	46.6	1.0	50.6	1.0	51.6	52.9	1.0	6610066
Wet Soluble Magnesium (Mg)	mg/L	17.8	5.0	16.9	5.0	17.9	5.0	12.6	14.8	5.0	6611473
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6611473
Wet Soluble Sodium (Na)	mg/L	21.7	5.0	19.1	5.0	17.0	5.0	14.3	17.1	5.0	6611473
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	<30	30	6611473
Sodium Adsorption Ratio	N/A	0.66	0.10	0.59	0.10	0.56	0.10	0.48	0.53	0.10	6608167

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FS8883		FS8884	FS8885		FS8886		
Sampling Date		2013/02/27		2013/02/27	2013/02/27		2013/02/27		
	UNITS	**SP13-06-130227**	**RDL**	**SP13-07-130227**	**SP13-08-130227**	**RDL**	**SP13-09-130227**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	11	10	12	<10	10	11	10	6612566
Soluble Chloride (Cl)	mg/L	23.7	5.0	29.4	24.1	5.0	20.0	5.0	6612565
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	13.7	2.9	14.2	11.5	2.4	9.9	2.5	6608168
Soluble Sodium (Na)	mg/kg	9.6	2.9	9.6	8.1	2.4	8.1	2.5	6608168
Soluble Parameters									
Soluble Conductivity	uS/cm	323	1.0	361	310	1.0	318	1.0	6610110
Soluble pH	pH Units	7.72	N/A	7.12	7.04	N/A	7.04	N/A	6610108
Wet Soluble Calcium (Ca)	mg/L	58.8	5.0	63.3	55.9	5.0	58.5	5.0	6611473
Saturation %	%	57.8	1.0	48.2	47.7	1.0	49.3	1.0	6610066
Wet Soluble Magnesium (Mg)	mg/L	15.0	5.0	17.3	16.6	5.0	16.1	5.0	6611473
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	20	<20	20	6611473
Wet Soluble Sodium (Na)	mg/L	16.7	5.0	19.8	16.9	5.0	16.4	5.0	6611473
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	30	<30	30	6611473
Sodium Adsorption Ratio	N/A	0.50	0.10	0.57	0.51	0.10	0.49	0.10	6608167

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FS8887	FS8888		FS8889	FS8895		
Sampling Date		2013/02/27	2013/02/27		2013/02/27	2013/02/27		
	UNITS	**SP13-10-130227**	**SP13-10-01-130227**	**RDL**	**SP13-11-130227**	**SP13-12-130227**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	<10	16	10	14	<10	10	6612566
Soluble Chloride (Cl)	mg/L	19.2	20.2	5.0	16.6	17.9	5.0	6612565
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	9.2	9.9	2.4	8.2	9.1	2.5	6608168
Soluble Sodium (Na)	mg/kg	9.1	8.2	2.4	6.9	7.7	2.5	6608168
Soluble Parameters								
Soluble Conductivity	uS/cm	298	301	1.0	286	304	1.0	6610110
Soluble pH	pH Units	6.94	7.06	N/A	7.09	7.51	N/A	6610108
Wet Soluble Calcium (Ca)	mg/L	50.7	52.0	5.0	52.1	55.8	5.0	6611473
Saturation %	%	48.0	48.9	1.0	49.2	50.4	1.0	6610066
Wet Soluble Magnesium (Mg)	mg/L	18.2	17.6	5.0	15.5	18.6	5.0	6611473
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	<20	20	6611473
Wet Soluble Sodium (Na)	mg/L	19.0	16.7	5.0	14.0	15.2	5.0	6611473
Wet Soluble Sulphur (S)	mg/L	<30	<30	30	<30	<30	30	6611473
Sodium Adsorption Ratio	N/A	0.58	0.51	0.10	0.44	0.45	0.10	6608167

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FS8896		FS8897		FS8898	FS8898		
Sampling Date		2013/02/27		2013/02/27		2013/02/27	2013/02/27		
	UNITS	**SP13-13-130227**	**RDL**	**SP13-14-130227**	**RDL**	**SP13-15-130227**	**SP13-15-130227 Lab-Dup**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	114	10	15	10	<10		10	6612566
Soluble Chloride (Cl)	mg/L	23.4	5.0	44.7	5.0	19.3	19.5	5.0	6612565
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	11.2	2.4	20.9	2.3	10.8		2.8	6608168
Soluble Sodium (Na)	mg/kg	9.9	2.4	12.5	2.3	7.9		2.8	6608168
Soluble Parameters									
Soluble Conductivity	uS/cm	434	1.0	393	1.0	178	176	1.0	6610110
Soluble pH	pH Units	7.04	N/A	7.26	N/A	6.75	6.90	N/A	6610108
Wet Soluble Calcium (Ca)	mg/L	80.1	5.0	63.2	5.0	33.3	33.7	5.0	6611473
Saturation %	%	47.9	1.0	46.7	1.0	56.0	58.0	1.0	6610066
Wet Soluble Magnesium (Mg)	mg/L	22.8	5.0	19.0	5.0	17.1	17.2	5.0	6611473
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	20	6611473
Wet Soluble Sodium (Na)	mg/L	20.6	5.0	26.8	5.0	14.2	14.0	5.0	6611473
Wet Soluble Sulphur (S)	mg/L	40	30	<30	30	<30	<30	30	6611473
Sodium Adsorption Ratio	N/A	0.52	0.10	0.76	0.10	0.50		0.10	6608167

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
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Sampler Initials: ME

Package 1	1.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - additonal analysis has been completed as per clients' emailed request. KD4 - March 6/13

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Maxxam Job #: B315776
Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6608202	Moisture	2013/03/01					<0.30	%	1.1	20		
6609367	D10-ANTHRACENE (sur.)	2013/02/28	83	60 - 130	86	60 - 130	88	%				
6609367	D8-ACENAPHTHYLENE (sur.)	2013/02/28	80	50 - 130	84	50 - 130	83	%				
6609367	D8-NAPHTHALENE (sur.)	2013/02/28	80	50 - 130	83	50 - 130	80	%				
6609367	TERPHENYL-D14 (sur.)	2013/02/28	90	60 - 130	94	60 - 130	94	%				
6609367	Naphthalene	2013/03/01	75	50 - 130	81	50 - 130	<0.010	mg/kg	17.1	50		
6609367	2-Methylnaphthalene	2013/03/01	86	50 - 130	83	50 - 130	<0.020	mg/kg	106(1)	50		
6609367	Acenaphthylene	2013/03/01	76	50 - 130	83	50 - 130	<0.0050	mg/kg	NC	50		
6609367	Acenaphthene	2013/03/01	81	50 - 130	87	50 - 130	<0.0050	mg/kg	31.4	50		
6609367	Fluorene	2013/03/01	83	50 - 130	86	50 - 130	<0.020	mg/kg	NC	50		
6609367	Phenanthrene	2013/03/01	82	60 - 130	90	60 - 130	<0.020	mg/kg	22.5	50		
6609367	Anthracene	2013/03/01	80	60 - 130	86	60 - 130	<0.0040	mg/kg	55.0(1)	50		
6609367	Fluoranthene	2013/03/01	65	60 - 130	89	60 - 130	<0.020	mg/kg	86.1(1)	50		
6609367	Pyrene	2013/03/01	70	60 - 130	93	60 - 130	<0.020	mg/kg	71.6(1)	50		
6609367	Benzo(a)anthracene	2013/03/01	66	60 - 130	83	60 - 130	<0.020	mg/kg	93.9(1)	50		
6609367	Chrysene	2013/03/01	67	60 - 130	85	60 - 130	<0.020	mg/kg	74.2(1)	50		
6609367	Benzo(b&j)fluoranthene	2013/03/01	58(1)	60 - 130	83	60 - 130	<0.020	mg/kg	80.6(1)	50		
6609367	Benzo(k)fluoranthene	2013/03/01	77	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
6609367	Benzo(a)pyrene	2013/03/01	73	60 - 130	87	60 - 130	<0.020	mg/kg	90.8(1)	50		
6609367	Indeno(1,2,3-cd)pyrene	2013/03/01	77	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
6609367	Dibenz(a,h)anthracene	2013/03/01	79	60 - 130	85	60 - 130	<0.050	mg/kg	NC	50		
6609367	Benzo(g,h,i)perylene	2013/03/01	71	60 - 130	82	60 - 130	<0.050	mg/kg	NC	50		
6609447	O-TERPHENYL (sur.)	2013/02/28	77	50 - 130	85	50 - 130	89	%				
6609447	EPH (C10-C19)	2013/02/28	69	50 - 130	107	50 - 130	<100	mg/kg	NC	40		
6609447	EPH (C19-C32)	2013/02/28	NC	50 - 130	93	50 - 130	<100	mg/kg	NC	40		
6609622	1,4-Difluorobenzene (sur.)	2013/02/28	98	70 - 130	100	70 - 130	101	%				
6609622	4-BROMOFLUOROBENZENE (sur.)	2013/02/28	102	70 - 130	101	70 - 130	100	%				
6609622	D10-ETHYLBENZENE (sur.)	2013/02/28	102	50 - 130	93	50 - 130	97	%				
6609622	D4-1,2-DICHLOROETHANE (sur.)	2013/02/28	102	70 - 130	101	70 - 130	105	%				
6609622	Benzene	2013/03/01	102	60 - 140	94	60 - 140	<0.0050	mg/kg	NC	40		
6609622	Toluene	2013/03/01	101	60 - 140	91	60 - 140	<0.020	mg/kg	NC	40		
6609622	Ethylbenzene	2013/03/01	111	60 - 140	99	60 - 140	<0.010	mg/kg	NC	40		
6609622	m & p-Xylene	2013/03/01	112	60 - 140	101	60 - 140	<0.040	mg/kg	NC	40		
6609622	o-Xylene	2013/03/01	117	60 - 140	105	60 - 140	<0.040	mg/kg	NC	40		
6609622	VH C6-C10	2013/03/01			92	60 - 140	<10	mg/kg	NC	40		
6609622	(C6-C10)	2013/02/28			99	60 - 140	<10	mg/kg				
6609622	Methyl-tert-butylether(MTBE)	2013/03/01					<0.10	mg/kg	NC	40		
6609622	Styrene	2013/02/28					<0.030	mg/kg				
6609622	Xylenes (Total)	2013/03/01					<0.040	mg/kg	NC	40		

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Report Date: 2013/03/06

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6609951	Total Antimony (Sb)	2013/03/01	NC	75 - 125	92	75 - 125	<0.10	mg/kg	0.9	30	104	70 - 130
6609951	Total Arsenic (As)	2013/03/01	NC	75 - 125	95	75 - 125	<0.50	mg/kg	0.6	30	99	70 - 130
6609951	Total Barium (Ba)	2013/03/01	NC	75 - 125	97	75 - 125	<0.10	mg/kg	0.2	35	107	70 - 130
6609951	Total Beryllium (Be)	2013/03/01	121	75 - 125	109	75 - 125	<0.40	mg/kg	NC	30		
6609951	Total Cadmium (Cd)	2013/03/01	103	75 - 125	99	75 - 125	<0.050	mg/kg	14.0	30	102	70 - 130
6609951	Total Chromium (Cr)	2013/03/01	NC	75 - 125	96	75 - 125	<1.0	mg/kg	2.2	30	102	70 - 130
6609951	Total Cobalt (Co)	2013/03/01	96	75 - 125	96	75 - 125	<0.30	mg/kg	0.9	30	94	70 - 130
6609951	Total Copper (Cu)	2013/03/01	NC	75 - 125	98	75 - 125	<0.50	mg/kg	0.1	30	87	70 - 130
6609951	Total Lead (Pb)	2013/03/01	NC	75 - 125	101	75 - 125	<0.10	mg/kg	1.1	35	102	70 - 130
6609951	Total Lithium (Li)	2013/03/01	104	75 - 125	102	75 - 125	<5.0	mg/kg	NC	30		
6609951	Total Manganese (Mn)	2013/03/01	NC	75 - 125	99	75 - 125	<0.20	mg/kg	3.0	30	104	70 - 130
6609951	Total Mercury (Hg)	2013/03/01	115	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35	78	70 - 130
6609951	Total Molybdenum (Mo)	2013/03/01	112	75 - 125	98	75 - 125	<0.10	mg/kg	1.3	35	115	70 - 130
6609951	Total Nickel (Ni)	2013/03/01	NC	75 - 125	96	75 - 125	<0.80	mg/kg	2.5	30	90	70 - 130
6609951	Total Selenium (Se)	2013/03/01	120	75 - 125	99	75 - 125	<0.50	mg/kg	NC	30		
6609951	Total Silver (Ag)	2013/03/01	101	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35		
6609951	Total Strontium (Sr)	2013/03/01	NC	75 - 125	100	75 - 125	<0.10	mg/kg	0.8	35	104	70 - 130
6609951	Total Thallium (Tl)	2013/03/01	102	75 - 125	99	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6609951	Total Tin (Sn)	2013/03/01	96	75 - 125	94	75 - 125	<0.10	mg/kg	0.1	35		
6609951	Total Titanium (Ti)	2013/03/01	NC	75 - 125	95	75 - 125	<1.0	mg/kg	1.1	35	107	70 - 130
6609951	Total Uranium (U)	2013/03/01	103	75 - 125	101	75 - 125	<0.050	mg/kg	0.7	30	102	70 - 130
6609951	Total Vanadium (V)	2013/03/01	NC	75 - 125	93	75 - 125	<2.0	mg/kg	2.1	30	108	70 - 130
6609951	Total Zinc (Zn)	2013/03/01	NC	75 - 125	100	75 - 125	<1.0	mg/kg	0.9	30	96	70 - 130
6609951	Total Aluminum (Al)	2013/03/01					<100	mg/kg	1	35	110	70 - 130
6609951	Total Calcium (Ca)	2013/03/01					<100	mg/kg	0.7	30	100	70 - 130
6609951	Total Iron (Fe)	2013/03/01					<100	mg/kg	0.9	30	98	70 - 130
6609951	Total Magnesium (Mg)	2013/03/01					<100	mg/kg	0.2	30	98	70 - 130
6609951	Total Phosphorus (P)	2013/03/01					<10	mg/kg	1.9	30	99	70 - 130
6609951	Total Bismuth (Bi)	2013/03/01					<0.10	mg/kg	NC	30		
6609951	Total Potassium (K)	2013/03/01					<100	mg/kg	0.08	35		
6609951	Total Sodium (Na)	2013/03/01					<100	mg/kg	NC	35		
6609951	Total Zirconium (Zr)	2013/03/01					<0.50	mg/kg	0.2	30		
6610050	Soluble (2:1) pH	2013/03/01			102	96 - 104			0.9	20		
6610066	Saturation %	2013/03/01			107	80 - 120	<1.0	%	3.5	30		
6610108	Soluble pH	2013/03/01			101	97 - 103			2.2	20		
6610110	Soluble Conductivity	2013/03/01			93	70 - 130	<1.0	uS/cm	1.1	35		
6610325	O-TERPHENYL (sur.)	2013/03/01	97	50 - 130	82	50 - 130	93	%				
6610325	F2 (C10-C16 Hydrocarbons)	2013/03/01	96	50 - 130	102	80 - 120	<10	mg/kg	NC	40		
6610325	F3 (C16-C34 Hydrocarbons)	2013/03/01	79	50 - 130	83	80 - 120	<10	mg/kg	NC	40		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6610325	F4 (C34-C50 Hydrocarbons)	2013/03/01	79	50 - 130	84	80 - 120	<10	mg/kg	NC	40		
6610325	Reached Baseline at C50	2013/03/01					YES, RDL=N/A	mg/kg	NC	50		
6610755	200 mesh (>.075 mm)	2013/03/01							1.6	35		
6610755	200 mesh (<.075 mm)	2013/03/01							2.3	35		
6611473	Wet Soluble Calcium (Ca)	2013/03/01					<5.0	mg/L	1.1	30		
6611473	Wet Soluble Magnesium (Mg)	2013/03/01					<5.0	mg/L	NC	30		
6611473	Wet Soluble Potassium (K)	2013/03/01					<20	mg/L	NC	30		
6611473	Wet Soluble Sodium (Na)	2013/03/01					<5.0	mg/L	NC	30		
6611473	Wet Soluble Sulphur (S)	2013/03/01					<30	mg/L	NC	30		
6612565	Soluble Chloride (Cl)	2013/03/01					<5.0	mg/L	NC	30		
6612566	Soluble Sulphate (SO4)	2013/03/01					<10	mg/L				
6620503	Initial pH of Sample	2013/03/06					4.95, RDL=N/A	pH Units	1.3	20		
6620503	Final pH of Leachate	2013/03/06					4.95, RDL=N/A	pH Units	0.2	20		
6620503	pH of Leaching Fluid	2013/03/06					4.95, RDL=N/A	pH Units	0	20		
6620503	pH after HCl	2013/03/06							0	20		
6625127	LEACHATE Arsenic (As)	2013/03/06	105	75 - 125	100	75 - 125	<0.10	mg/L	NC	35		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics

8577 Commerce Court
Burnaby, BC V5A 4N5
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CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

MAXXAM JOB # B315776 ANALYSIS REQUEST F 147121

COMPANY NAME: SNC-Lavalin Environment

PH. #: 250-385-5028
E-mail: rob.stacey@snclavalin.com
FAX #:

COMPANY ADDRESS: 202-3440 Douglas St. Victoria, BC V8Z3L5

CLIENT PROJECT ID: (#) 511828-A013

SAMPLER NAME (PRINT): MARK EDWARDS

PROJECT MANAGER: Rob Stacey

LAB USE ONLY

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	DRINKING WATER	OTHER	# CONTAINERS	SAMPLING DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX / LH	BTEX / VPH MTBE	VOCs / VPH	EPH	TEH	PAH	LEPH/HEPH	CCME-PHC (FRACTIONS 1-4 PLUS BTEX)	CCME-PHCS (FRACTIONS 2-4)	CCME BTEX (FRACTION 1 PLUS BTEX)	PHENOLS BY 4AAP	PHENOLS BY GCMS	TOTAL O&G	MINERAL O&G	Dissolved Metals: Field Filtered? YES NO	Field Preserved? YES NO	Total Metals Field Preserved? YES NO	NITRATE	NITRITE	AMMONIA	CHLORIDE	FLUORIDE	SULPHATE	TOTAL SUSPENDED SOLIDS (NFR)	CYANIDE SAD	WAD	LEACHABLE LEAD (AA) (TCLP)	LEACHABLE BTEX (AA) (TCLP)	Salinity	Particle Size (+/- 75µm)	HOLD
1 SP13-01-130227	FS 8878			✓			2	27/02/13		0						X										X												X	X		
2 SP13-02-130227	FS 8879			↓			↓	↓		0						X										X												X			
3 SP13-03-130227	FS 8880									0						X										X												X			
4 SP13-04-130227	FS 8881									0						X										X												X			
5 SP13-05-130227	FS 8882									0						X										X												X			
6 SP13-06-130227	FS 8883									0						X										X												X			
7 SP13-07-130227	FS 8884									0						X										X												X	X		
8 SP13-08-130227	FS 8885									0						X										X												X			
9 SP13-09-130227	FS 8886									5µm	X		X			X		X								X												X			
10 SP13-10-130227	FS 8887									0						X										X												X			
11 SP13-10-01-130227	FS 8888									0						X										X												X			
12 SP13-11-130227	FS 8889									0						X										X												X			

B315776

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD 5 BUSINESS DAYS ☐
RUSH 3 BUSINESS DAYS ☐
RUSH 2 BUSINESS DAYS ☐
URGENT 1 BUSINESS DAY ☑

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME
☑ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS: Attn: Kim Domino

SOIL JARS USED AND NOT SUBMITTED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 1, 1, 1 CS:NA

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Mark Edwards	DATE: DD/MM/YY 27/02/13	TIME: 16:21	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Marie Laure Berthier 2013/02/28 08:00

COCFORM - BC - 09/08

ORIGINAL - MAXXAM YELLOW - CLIENT

Maxxam Analytics
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

MAXXAM JOB # B315776 ANALYSIS REQUEST F 147122

COMPANY NAME: SNC Lavalin Environment
PH. #: 250-385-5028
E-mail: rob.stacey@snclavalin.com
FAX #:
COMPANY ADDRESS: 202-3440 Douglas St. Victoria, BC V8Z 3L5
CLIENT PROJECT ID: (#) 511828-A013
SAMPLER NAME (PRINT): MARK EDWARDS
PROJECT MANAGER: Rob Stacey

LAB USE ONLY

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	DRINKING WATER	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX / LH	BTEX / VPH ✓ MTBE	VOC's / VPH	EPH	TEH	PAH	LEPH/HEPH	CCME-PHC (FRACTIONS 1-4 PLUS BTEX)	CCME-PHCS (FRACTIONS 2-4)	CCME BTEX (FRACTION 1 PLUS BTEX)	PHENOLS BY 4AAP	PHENOLS BY GCMS	TOTAL O&G	MINERAL O&G	Dissolved Metals	Field Filtered? YES NO	Field Preserved? YES NO	Total Metals Field Preserved? YES NO	NITRATE	NITRITE	AMMONIA	CHLORIDE	FLUORIDE	SULPHATE	TOTAL SUSPENDED SOLIDS (NFR)	CYANIDE SAD	WAD	LEACHABLE LEAD (AA)	(TCLP)	LEACHABLE BTEX (AA)	(TCLP)	Salinity	HOLD
1 SP13-12-130227	FS8895			/			2	27/02/13		0						X											X															X	
2 SP13-13-130227	FS8896			/			2	↓		0						X											X															X	
3 SP13-14-130227	FS8897			/			2			10	X			X		X			X								X															X	
4 SP13-15-130227	FS8898			/			2			0						X											X															X	
5																																											
6																																											
7																																											
8																																											
9																																											
10																																											
11																																											
12																																											

B315776

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD 5 BUSINESS DAYS ☐
RUSH 3 BUSINESS DAYS ☐
RUSH 2 BUSINESS DAYS ☐
URGENT 1 BUSINESS DAY ☑

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☑ CCME
☑ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS: Attn: Kim Domino

SOIL JARS USED AND NOT SUBMITTED:

LAB USE ONLY
ARRIVAL TEMPERATURE °C: 1,1,1
CS:NA
DUE DATE:
LOG IN CHECK:

RELINQUISHED BY SAMPLER:	DATE: DD/MM/YY 27/02/13	TIME: 16:21	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY LABORATORY: Laurel Barthier 2013/02/28 0800

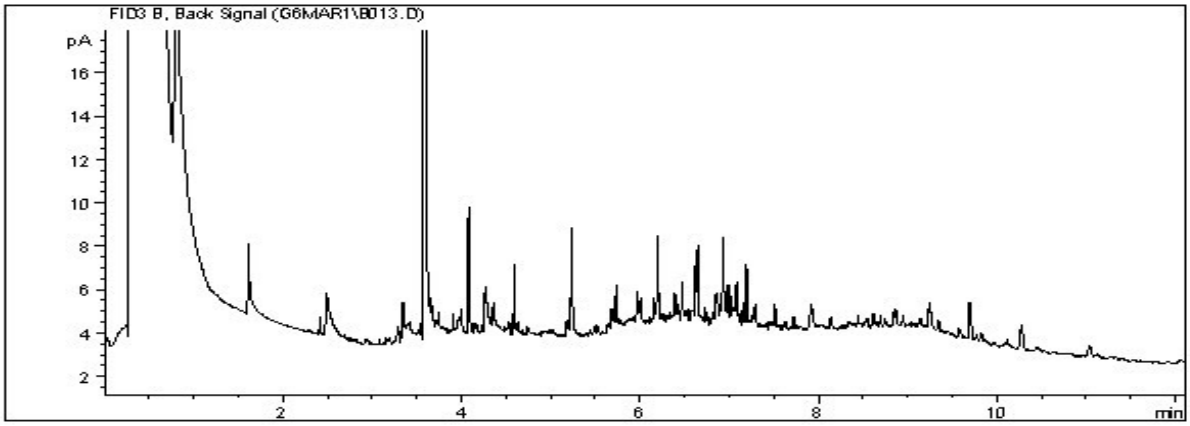
COCFORM - BC - 09/08

ORIGINAL - MAXXAM YELLOW - CLIENT

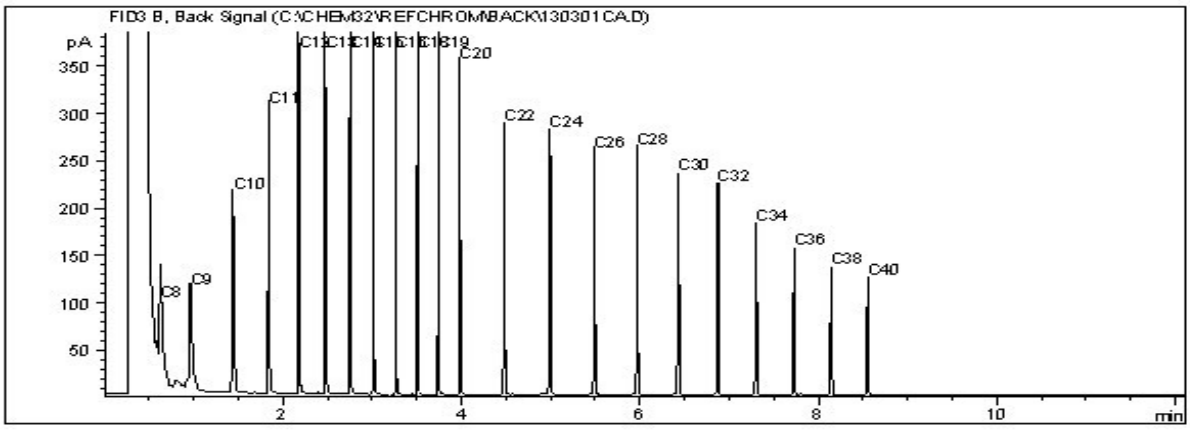
Report Date: 2013/03/06
Maxxam Job #: B315776
Maxxam Sample: FS8886

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Reference: COLWOOD 18
Client ID: SP13-09-130227

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

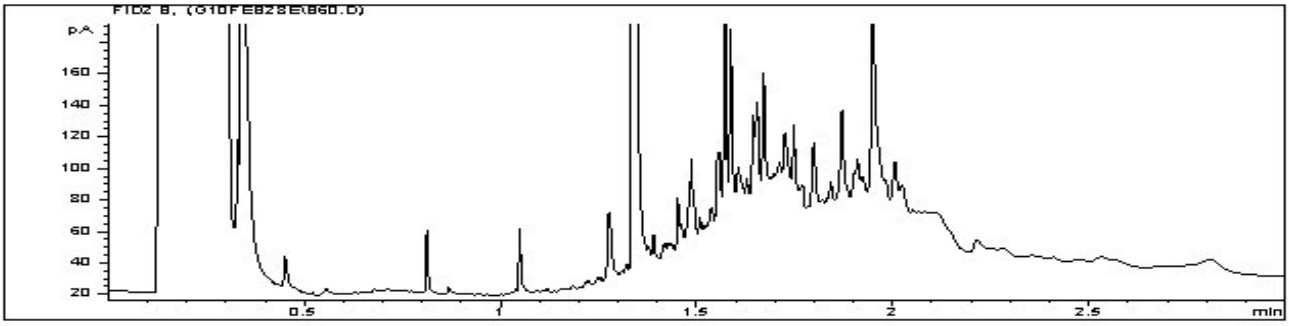
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

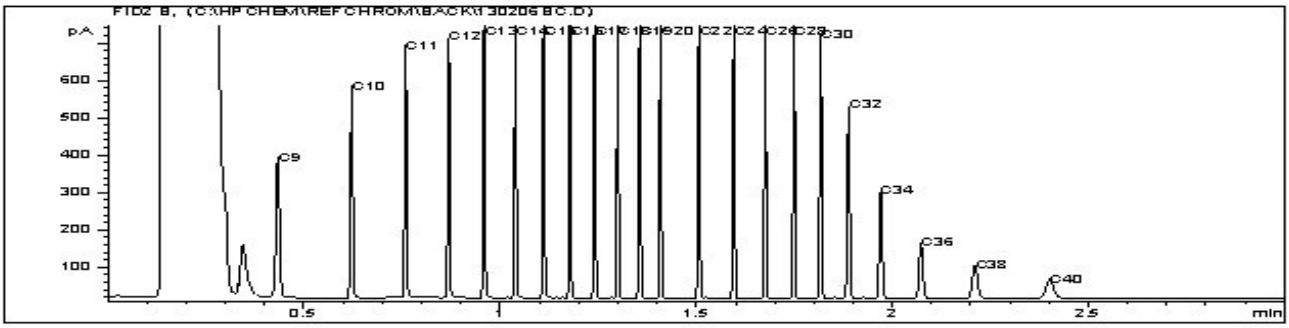
Report Date: 2013/03/06
Maxxam Job #: B315776
Maxxam Sample: FS8886

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Reference: COLWOOD 18
Client ID: SP13-09-130227

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

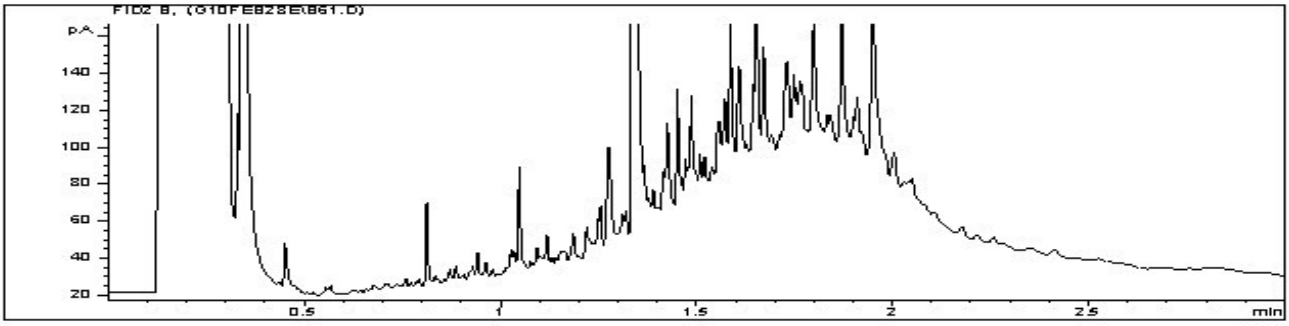
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

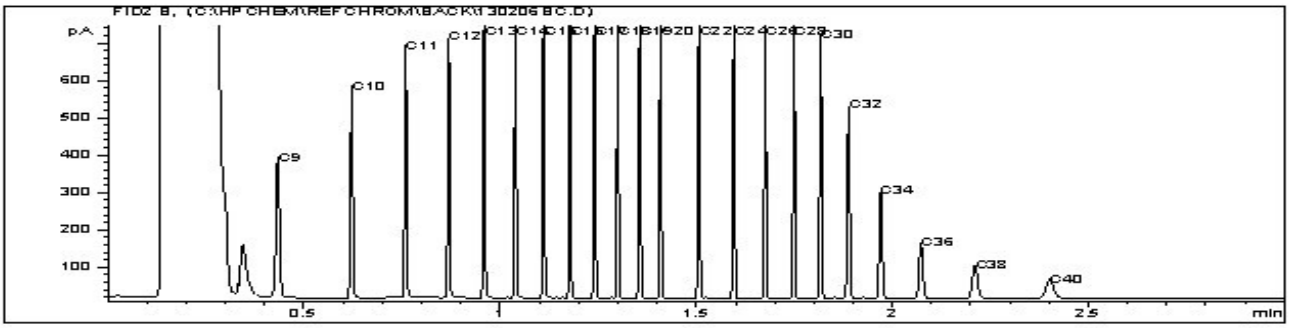
Report Date: 2013/03/06
Maxxam Job #: B315776
Maxxam Sample: FS8897

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Reference: COLWOOD 18
Client ID: SP13-14-130227

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

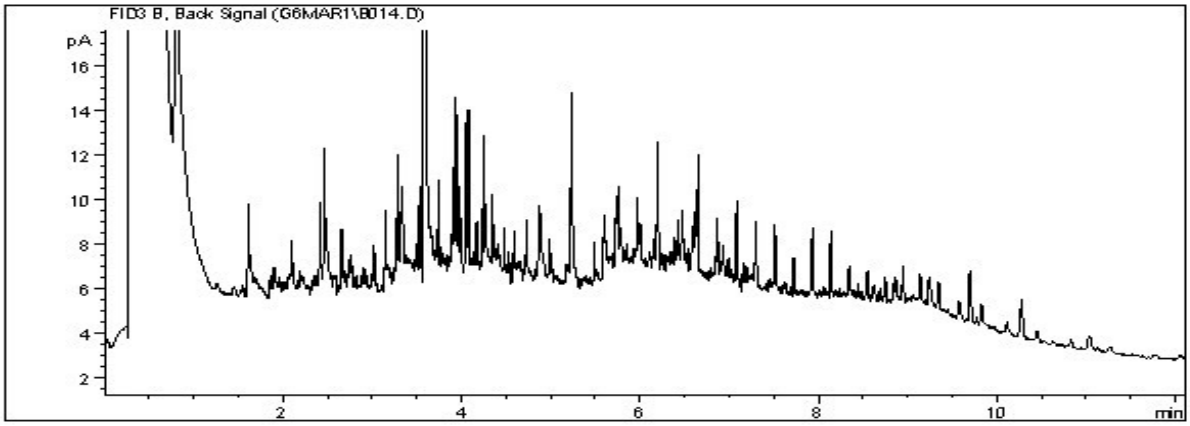
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

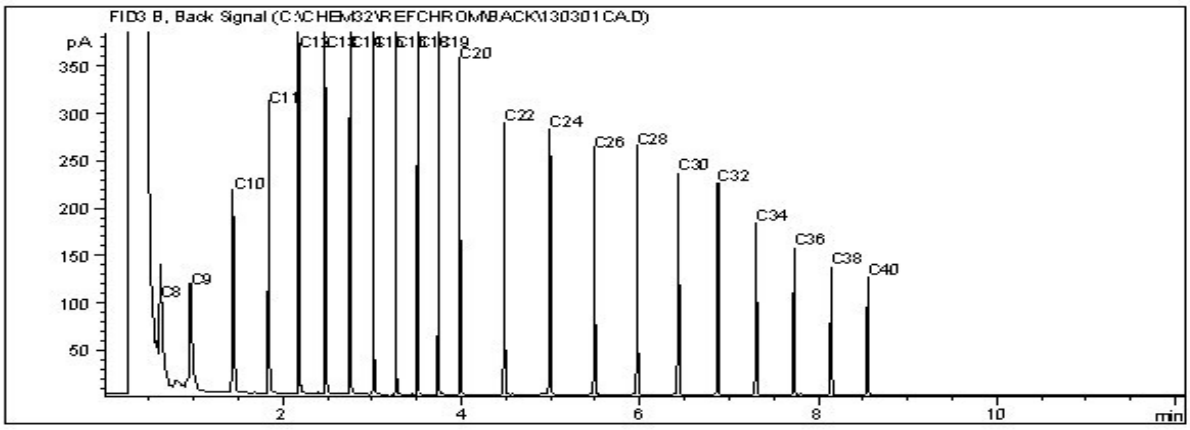
Report Date: 2013/03/06
Maxxam Job #: B315776
Maxxam Sample: FS8897

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Reference: COLWOOD 18
Client ID: SP13-14-130227

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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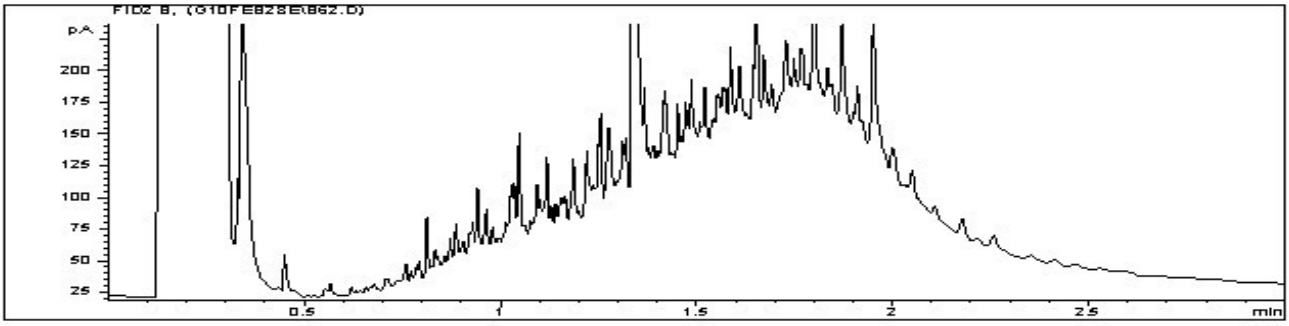
Success Through Science®

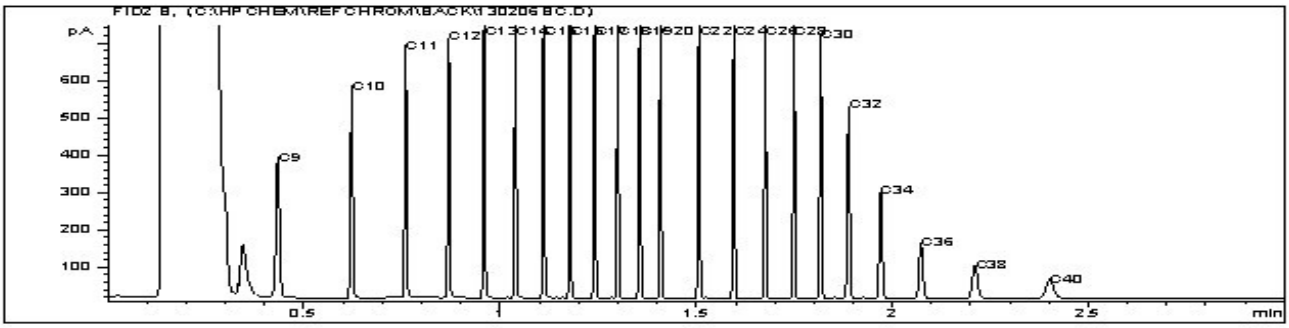
Report Date: 2013/03/06
Maxxam Job #: B315776
Maxxam Sample: FS8897 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828 A013
Site Reference: COLWOOD 18
Client ID: SP13-14-130227

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35326825, 35326824, 35326823

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/12

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B316165
Received: 2013/03/01, 08:10

Sample Matrix: Soil
Samples Received: 30

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/01	2013/03/01	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	14	2013/03/01	2013/03/02	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	18	2013/03/02	2013/03/04	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	5	2013/03/04	2013/03/05	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	1	2013/03/04	2013/03/06	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	6	2013/03/05	2013/03/06	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	18	2013/03/02	2013/03/04	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	6	2013/03/04	2013/03/06	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	6	2013/03/05	2013/03/06	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	15	N/A	2013/03/04	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	3	2013/03/01	2013/03/04	BBY8SOP-00030	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	12	2013/03/06	2013/03/11	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	20	2013/03/02	2013/03/04	BBY7SOP-00001	EPA 6020A
Elements by ICPMS (total)	10	2013/03/04	2013/03/04	BBY7SOP-00001	EPA 6020A
Metals - TCLP	1	2013/03/06	2013/03/07	BBY7SOP-00001	EPA 6020A
Moisture	30	N/A	2013/03/02	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	11	2013/03/01	2013/03/01	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	9	2013/03/01	2013/03/02	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	10	2013/03/01	2013/03/04	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	20	N/A	2013/03/04	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	10	N/A	2013/03/05	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	20	N/A	2013/03/04	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	10	N/A	2013/03/05	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	30	2013/03/04	2013/03/04	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	18	2013/03/02	2013/03/02	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	6	2013/03/04	2013/03/04	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	6	2013/03/05	2013/03/05	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	1	N/A	2013/03/07	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	20	N/A	2013/03/04		
Sodium Adsorption Ratio SP	10	N/A	2013/03/05		
Saturated Paste	18	2013/03/02	2013/03/02	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	6	2013/03/04	2013/03/04	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	6	2013/03/05	2013/03/05	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	18	N/A	2013/03/04		
Soluble Ions Na, Cl	5	N/A	2013/03/06		
Soluble Ions Na, Cl	7	N/A	2013/03/07		
Sulphate (soluble) (soil)	18	2013/03/02	2013/03/04	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	6	2013/03/04	2013/03/05	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	6	2013/03/05	2013/03/06	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	18	N/A	2013/03/04	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	6	N/A	2013/03/05	BBY7SOP-00002	EPA 6020A

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Sample Matrix: Soil
Samples Received: 30

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Soluble Cations (Ca,K,Mg,Na,S)	6	N/A	2013/03/06	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	3	N/A	2013/03/04	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	3	2013/03/01	2013/03/04	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam

Success Through Science®

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FT1108		FT1109	FT1110	FT1111	FT1112		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-F1-130228**	**QC Batch**	**EXC13-F2-130228**	**EXC13-F3-130228**	**EXC13-F4-130228**	**EXC13-F5-130228**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	6637363	<10	<10	<10	<10	10	6637445
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	6637363	<10	<10	<10	30	10	6637445
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	6637363	<10	<10	<10	12	10	6637445
Reached Baseline at C50	mg/kg	YES	6637363	YES	YES	YES	YES	N/A	6637445
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	103	6637363	113	89	94	115		6637445

Maxxam ID		FT1113	FT1114	FT1115	FT1116	FT1117	FT1155		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W1-130228**	**EXC13-W2-130228**	**EXC13-W3-130228**	**EXC13-W4-130228**	**EXC13-W5-130228**	**EXC13-W6-130228**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	11	<10	<10	<10	<10	11	10	6637445
F3 (C16-C34 Hydrocarbons)	mg/kg	18	18	<10	<10	54	230	10	6637445
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	44	120	10	6637445
Reached Baseline at C50	mg/kg	YES	YES	YES	YES	YES	YES	N/A	6637445
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	97	113	99	111	96	100		6637445

Maxxam ID		FT1156		FT1209	FT1209	FT1213	FT1216		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W7-130228**	**QC Batch**	**SP13-25-130228**	**SP13-25-130228 Lab-Dup**	**SP13-29-130228**	**SP13-31-130228**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	6637445	<10	<10	300	<10	10	6613808
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	6637445	50	48	1300	58	10	6613808
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	6637445	35	30	460	39	10	6613808
Reached Baseline at C50	mg/kg	YES	6637445	YES	YES	YES	YES	N/A	6613808
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	104	6637445	91	92	94	98		6613808

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FT1108	FT1109	FT1109	FT1110	FT1111	FT1112		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-F1-130228**	**EXC13-F2-130228**	**EXC13-F2-130228 Lab-Dup**	**EXC13-F3-130228**	**EXC13-F4-130228**	**EXC13-F5-130228**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	18	14	14	15	22	17	0.30	6611547

Maxxam ID		FT1113	FT1114	FT1115	FT1116	FT1117	FT1155		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W1-130228**	**EXC13-W2-130228**	**EXC13-W3-130228**	**EXC13-W4-130228**	**EXC13-W5-130228**	**EXC13-W6-130228**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	22	22	26	25	24	24	0.30	6611547

Maxxam ID		FT1156		FT1157	FT1158	FT1159	FT1160	FT1161		
Sampling Date		2013/02/28		2013/02/27	2013/02/27	2013/02/27	2013/02/28	2013/02/28		
	UNITS	**EXC13-W7-130228**	**QC Batch**	**SP13-16-130227**	**SP13-17-130227**	**SP13-18-130227**	**SP13-19-130228**	**SP13-20-130228**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	19	6611547	19	21	16	19	18	0.30	6611364

Maxxam ID		FT1162	FT1163	FT1164	FT1207	FT1208		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-21-130228**	**SP13-22-130228**	**SP13-20-01-130228**	**SP13-23-130228**	**SP13-24-130228**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	17	19	16	19	24	0.30	6611364

Maxxam ID		FT1209		FT1210	FT1211	FT1212	FT1213		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-25-130228**	**QC Batch**	**SP13-26-130228**	**SP13-27-130228**	**SP13-28-130228**	**SP13-29-130228**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	19	6611354	20	18	20	21	0.30	6611364

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FT1214	FT1215	FT1215	FT1216		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-30-130228**	**SP13-30-01-130228**	**SP13-30-01-130228 Lab-Dup**	**SP13-31-130228**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	20	20	20	19	0.30	6611364

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FT1158		
Sampling Date		2013/02/27		
	UNITS	**SP13-17-130227**	**RDL**	**QC Batch**
TCLP Extraction Procedure				
Initial pH of Sample	pH Units	7.29	N/A	6624991
pH after HCl	pH Units	1.75	N/A	6624991
Final pH of Leachate	pH Units	5.38	N/A	6624991
pH of Leaching Fluid	pH Units	4.95	N/A	6624991

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FT1209	FT1209	FT1213	FT1216		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-25-130228**	**SP13-25-130228 Lab-Dup**	**SP13-29-130228**	**SP13-31-130228**	**RDL**	**QC Batch**
Calculated Parameters							
LEPH (C10-C19 less PAH)	mg/kg	<100		412	<100	100	6610070
HEPH (C19-C32 less PAH)	mg/kg	<100		1060	<100	100	6610070
Hydrocarbons							
EPH (C10-C19)	mg/kg	<100	<100	412	<100	100	6613794
EPH (C19-C32)	mg/kg	<100	<100	1060	<100	100	6613794
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	93	96	95	99		6613794

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FT1108	FT1109	FT1110	FT1110	FT1111	FT1112		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-F1-130228**	**EXC13-F2-130228**	**EXC13-F3-130228**	**EXC13-F3-130228 Lab-Dup**	**EXC13-F4-130228**	**EXC13-F5-130228**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10		<10	<10	10	6610859
Volatiles									
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6612766
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6612766
Toluene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6612766
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6612766
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
o-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
Styrene	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	6612766
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
(C6-C10)	mg/kg	<10	<10	<10	<10	<10	<10	10	6612766
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	99	113	99	99	99	99		6612766
4-BROMOFLUOROBENZENE (sur.)	%	102	101	101	103	103	101		6612766
D10-ETHYLBENZENE (sur.)	%	96	97	93	94	95	94		6612766
D4-1,2-DICHLOROETHANE (sur.)	%	98	97	97	98	98	98		6612766

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FT1113	FT1114	FT1115	FT1116	FT1117		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W1-130228**	**EXC13-W2-130228**	**EXC13-W3-130228**	**EXC13-W4-130228**	**EXC13-W5-130228**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	<10	10	6610859
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6612766
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6612766
Toluene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6612766
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6612766
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
o-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
Styrene	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	6612766
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6612766
(C6-C10)	mg/kg	<10	<10	<10	<10	<10	10	6612766
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	113	100	114	98	114		6612766
4-BROMOFLUOROBENZENE (sur.)	%	102	101	100	102	101		6612766
D10-ETHYLBENZENE (sur.)	%	92	94	94	94	96		6612766
D4-1,2-DICHLOROETHANE (sur.)	%	99	104	99	98	98		6612766

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FT1155	FT1156		FT1209	FT1213	FT1216		
Sampling Date		2013/02/28	2013/02/28		2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W6-130228**	**EXC13-W7-130228**	**QC Batch**	**SP13-25-130228**	**SP13-29-130228**	**SP13-31-130228**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	<10	6610859	<10	<10	<10	10	6610859
Volatiles									
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	6612766	<0.10	<0.10	<0.10	0.10	6612405
Benzene	mg/kg	<0.0050	<0.0050	6612766	<0.0050	<0.0050	<0.0050	0.0050	6612405
Toluene	mg/kg	<0.020	<0.020	6612766	<0.020	<0.020	<0.020	0.020	6612405
Ethylbenzene	mg/kg	<0.010	<0.010	6612766	<0.010	<0.010	<0.010	0.010	6612405
m & p-Xylene	mg/kg	<0.040	<0.040	6612766	<0.040	<0.040	<0.040	0.040	6612405
o-Xylene	mg/kg	<0.040	<0.040	6612766	<0.040	<0.040	<0.040	0.040	6612405
Styrene	mg/kg	<0.030	<0.030	6612766	<0.030	<0.030	<0.030	0.030	6612405
Xylenes (Total)	mg/kg	<0.040	<0.040	6612766	<0.040	<0.040	<0.040	0.040	6612405
(C6-C10)	mg/kg	<10	<10	6612766	<10	<10	<10	10	6612405
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	100	114	6612766	103	102	102		6612405
4-BROMOFLUOROBENZENE (sur.)	%	101	103	6612766	96	96	95		6612405
D10-ETHYLBENZENE (sur.)	%	96	96	6612766	96	97	97		6612405
D4-1,2-DICHLOROETHANE (sur.)	%	98	100	6612766	98	99	97		6612405

RDL = Reportable Detection Limit

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1108	FT1109	FT1110	FT1111	FT1112	FT1113		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-F1-130228**	**EXC13-F2-130228**	**EXC13-F3-130228**	**EXC13-F4-130228**	**EXC13-F5-130228**	**EXC13-W1-130228**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.67	8.25	8.27	6.27	7.37	6.71	0.010	6613038
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18200	17500	19100	23100	22400	25200	100	6613036
Total Antimony (Sb)	mg/kg	0.18	0.18	0.20	0.20	0.27	0.26	0.10	6613036
Total Arsenic (As)	mg/kg	3.30	5.71	6.26	5.29	5.19	4.77	0.50	6613036
Total Barium (Ba)	mg/kg	56.6	79.0	81.0	99.8	85.0	86.9	0.10	6613036
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.41	0.43	<0.40	0.47	0.40	6613036
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6613036
Total Cadmium (Cd)	mg/kg	0.161	0.262	0.306	0.394	0.194	0.374	0.050	6613036
Total Calcium (Ca)	mg/kg	7140	5970	5870	4500	7490	7180	100	6613036
Total Chromium (Cr)	mg/kg	40.0	31.4	34.2	33.4	29.4	36.0	1.0	6613036
Total Cobalt (Co)	mg/kg	7.46	10.9	11.3	16.3	9.07	12.9	0.30	6613036
Total Copper (Cu)	mg/kg	28.8	30.8	30.5	55.4	26.4	30.4	0.50	6613036
Total Iron (Fe)	mg/kg	25600	25000	25900	31000	22300	32400	100	6613036
Total Lead (Pb)	mg/kg	3.69	3.92	4.06	5.49	8.45	11.8	0.10	6613036
Total Lithium (Li)	mg/kg	11.2	9.7	10.5	10.3	11.4	10.3	5.0	6613036
Total Magnesium (Mg)	mg/kg	5540	5420	5460	5290	5900	6700	100	6613036
Total Manganese (Mn)	mg/kg	288	490	519	1000	399	813	0.20	6613036
Total Mercury (Hg)	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6613036
Total Molybdenum (Mo)	mg/kg	0.96	0.74	0.93	1.58	1.07	1.37	0.10	6613036
Total Nickel (Ni)	mg/kg	24.5	28.8	29.3	37.8	28.4	32.0	0.80	6613036
Total Phosphorus (P)	mg/kg	236	432	417	453	498	256	10	6613036
Total Potassium (K)	mg/kg	626	556	595	507	448	434	100	6613036
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6613036
Total Silver (Ag)	mg/kg	0.122	0.077	0.079	0.141	0.062	0.079	0.050	6613036
Total Sodium (Na)	mg/kg	249	246	266	170	168	197	100	6613036
Total Strontium (Sr)	mg/kg	33.9	37.3	40.6	18.8	47.3	23.0	0.10	6613036
Total Thallium (Tl)	mg/kg	0.063	0.054	0.060	0.054	0.062	0.050	0.050	6613036
Total Tin (Sn)	mg/kg	0.34	0.28	0.33	0.44	0.37	0.48	0.10	6613036
Total Titanium (Ti)	mg/kg	929	891	950	982	673	1180	1.0	6613036
Total Uranium (U)	mg/kg	0.433	0.671	0.729	0.526	0.958	0.775	0.050	6613036
Total Vanadium (V)	mg/kg	59.1	61.5	66.1	69.4	61.1	69.5	2.0	6613036
Total Zinc (Zn)	mg/kg	40.2	44.6	42.8	100	54.1	72.3	1.0	6613036
Total Zirconium (Zr)	mg/kg	3.46	7.94	8.44	3.28	1.20	4.30	0.50	6613036

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1114	FT1115	FT1116	FT1117		FT1155		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		2013/02/28		
	UNITS	**EXC13-W2-130228**	**EXC13-W3-130228**	**EXC13-W4-130228**	**EXC13-W5-130228**	**QC Batch**	**EXC13-W6-130228**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	6.81	7.80	7.80	7.67	6613038	7.66	0.010	6613758
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	24400	24500	24300	23200	6613036	22100	100	6613753
Total Antimony (Sb)	mg/kg	0.22	0.34	0.34	0.14	6613036	0.75	0.10	6613753
Total Arsenic (As)	mg/kg	4.77	8.87	9.14	4.65	6613036	6.39	0.50	6613753
Total Barium (Ba)	mg/kg	89.5	156	167	69.9	6613036	85.3	0.10	6613753
Total Beryllium (Be)	mg/kg	0.48	0.52	0.52	0.51	6613036	<0.40	0.40	6613753
Total Bismuth (Bi)	mg/kg	<0.10	0.12	0.11	<0.10	6613036	<0.10	0.10	6613753
Total Cadmium (Cd)	mg/kg	0.346	1.32	1.31	0.312	6613036	0.181	0.050	6613753
Total Calcium (Ca)	mg/kg	7130	9230	9420	7930	6613036	6900	100	6613753
Total Chromium (Cr)	mg/kg	35.5	32.2	32.9	32.5	6613036	28.6	1.0	6613753
Total Cobalt (Co)	mg/kg	12.9	20.7	20.8	9.51	6613036	9.57	0.30	6613753
Total Copper (Cu)	mg/kg	33.2	97.0	98.2	27.9	6613036	30.5	0.50	6613753
Total Iron (Fe)	mg/kg	32900	50900	51500	26900	6613036	21700	100	6613753
Total Lead (Pb)	mg/kg	8.86	9.33	9.20	6.22	6613036	11.1	0.10	6613753
Total Lithium (Li)	mg/kg	9.6	10.0	9.8	22.4	6613036	11.5	5.0	6613753
Total Magnesium (Mg)	mg/kg	6440	8550	8880	4330	6613036	6130	100	6613753
Total Manganese (Mn)	mg/kg	790	4380	4700	471	6613036	492	0.20	6613753
Total Mercury (Hg)	mg/kg	<0.050	0.074	0.056	0.060	6613036	<0.050	0.050	6613753
Total Molybdenum (Mo)	mg/kg	1.48	3.08	3.15	1.95	6613036	0.97	0.10	6613753
Total Nickel (Ni)	mg/kg	32.5	42.4	41.4	29.7	6613036	26.6	0.80	6613753
Total Phosphorus (P)	mg/kg	318	1480	1530	235	6613036	503	10	6613753
Total Potassium (K)	mg/kg	416	957	1020	426	6613036	469	100	6613753
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6613036	<0.50	0.50	6613753
Total Silver (Ag)	mg/kg	0.074	0.478	0.597	0.136	6613036	0.058	0.050	6613753
Total Sodium (Na)	mg/kg	168	108	<100	236	6613036	171	100	6613753
Total Strontium (Sr)	mg/kg	23.5	21.4	19.3	35.9	6613036	39.9	0.10	6613753
Total Thallium (Tl)	mg/kg	0.053	0.172	0.158	0.080	6613036	0.070	0.050	6613753
Total Tin (Sn)	mg/kg	0.45	0.37	0.32	0.41	6613036	0.50	0.10	6613753
Total Titanium (Ti)	mg/kg	993	1060	1050	774	6613036	697	1.0	6613753
Total Uranium (U)	mg/kg	0.799	0.716	0.709	1.02	6613036	0.656	0.050	6613753
Total Vanadium (V)	mg/kg	68.7	66.8	66.4	62.5	6613036	60.1	2.0	6613753
Total Zinc (Zn)	mg/kg	70.1	121	120	42.7	6613036	69.6	1.0	6613753
Total Zirconium (Zr)	mg/kg	4.37	3.63	3.57	3.06	6613036	1.03	0.50	6613753

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1156	FT1157	FT1158	FT1159	FT1160	FT1161		
Sampling Date		2013/02/28	2013/02/27	2013/02/27	2013/02/27	2013/02/28	2013/02/28		
	UNITS	**EXC13-W7-130228**	**SP13-16-130227**	**SP13-17-130227**	**SP13-18-130227**	**SP13-19-130228**	**SP13-20-130228**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.17	7.58	7.66	7.50	7.66	7.64	0.010	6613758
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21700	20900	20700	21500	22000	21200	100	6613753
Total Antimony (Sb)	mg/kg	0.66	25.7	31.5	29.5	27.9	19.0	0.10	6613753
Total Arsenic (As)	mg/kg	4.10	65.4	76.8	61.7	63.4	44.8	0.50	6613753
Total Barium (Ba)	mg/kg	75.3	108	111	107	115	109	0.10	6613753
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.44	0.43	0.43	<0.40	0.40	6613753
Total Bismuth (Bi)	mg/kg	<0.10	0.28	0.40	0.24	0.33	0.20	0.10	6613753
Total Cadmium (Cd)	mg/kg	0.149	0.490	1.01	0.440	0.570	0.461	0.050	6613753
Total Calcium (Ca)	mg/kg	5590	7000	7690	7950	8900	7110	100	6613753
Total Chromium (Cr)	mg/kg	26.1	36.8	38.3	36.7	40.7	37.5	1.0	6613753
Total Cobalt (Co)	mg/kg	8.75	13.8	14.5	14.6	14.5	13.3	0.30	6613753
Total Copper (Cu)	mg/kg	29.3	150	163	130	156	122	0.50	6613753
Total Iron (Fe)	mg/kg	22100	29800	29700	29500	30400	28900	100	6613753
Total Lead (Pb)	mg/kg	6.92	79.0	140	87.7	94.1	65.3	0.10	6613753
Total Lithium (Li)	mg/kg	10.4	13.0	12.2	13.2	13.4	12.0	5.0	6613753
Total Magnesium (Mg)	mg/kg	6010	6820	6940	7010	7000	7220	100	6613753
Total Manganese (Mn)	mg/kg	393	560	572	574	635	601	0.20	6613753
Total Mercury (Hg)	mg/kg	<0.050	0.193	0.378	0.174	0.630	0.169	0.050	6613753
Total Molybdenum (Mo)	mg/kg	0.46	4.61	5.08	3.99	5.41	3.73	0.10	6613753
Total Nickel (Ni)	mg/kg	27.7	28.5	28.5	29.1	30.7	28.2	0.80	6613753
Total Phosphorus (P)	mg/kg	500	635	659	659	740	682	10	6613753
Total Potassium (K)	mg/kg	421	803	781	795	761	743	100	6613753
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6613753
Total Silver (Ag)	mg/kg	0.051	0.141	0.325	0.147	0.412	0.127	0.050	6613753
Total Sodium (Na)	mg/kg	209	229	275	282	269	219	100	6613753
Total Strontium (Sr)	mg/kg	28.9	45.5	46.7	46.1	54.0	44.8	0.10	6613753
Total Thallium (Tl)	mg/kg	0.051	0.091	0.113	0.083	0.098	0.081	0.050	6613753
Total Tin (Sn)	mg/kg	0.38	5.83	6.51	6.48	6.14	6.32	0.10	6613753
Total Titanium (Ti)	mg/kg	738	1010	954	986	958	895	1.0	6613753
Total Uranium (U)	mg/kg	0.394	0.787	0.864	0.678	0.931	0.772	0.050	6613753
Total Vanadium (V)	mg/kg	60.5	71.6	69.9	73.0	74.8	71.2	2.0	6613753
Total Zinc (Zn)	mg/kg	56.0	489	540	410	513	350	1.0	6613753
Total Zirconium (Zr)	mg/kg	1.03	2.68	2.62	2.96	2.63	2.55	0.50	6613753

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1162	FT1162	FT1163	FT1164		FT1207	FT1208		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		2013/02/28	2013/02/28		
	UNITS	**SP13-21-130228**	**SP13-21-130228 Lab-Dup**	**SP13-22-130228**	**SP13-20-01-130228**	**QC Batch**	**SP13-23-130228**	**SP13-24-130228**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	7.32	7.39	7.34	7.57	6613758	7.36	7.31	0.010	6613023
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	21700	21600	21900	22500	6613753	23400	22700	100	6613022
Total Antimony (Sb)	mg/kg	10.6	10.2	3.23	23.5	6613753	10.6	9.98	0.10	6613022
Total Arsenic (As)	mg/kg	27.6	27.4	10.2	50.3	6613753	26.5	23.6	0.50	6613022
Total Barium (Ba)	mg/kg	98.3	101	97.1	111	6613753	108	103	0.10	6613022
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	0.46	6613753	0.45	0.40	0.40	6613022
Total Bismuth (Bi)	mg/kg	0.16	0.15	<0.10	0.24	6613753	0.15	0.15	0.10	6613022
Total Cadmium (Cd)	mg/kg	0.323	0.380	0.270	0.367	6613753	0.336	0.353	0.050	6613022
Total Calcium (Ca)	mg/kg	6180	6160	6590	7630	6613753	7060	7020	100	6613022
Total Chromium (Cr)	mg/kg	37.0	37.1	34.0	38.2	6613753	36.3	37.5	1.0	6613022
Total Cobalt (Co)	mg/kg	13.2	13.1	12.9	14.0	6613753	13.3	13.2	0.30	6613022
Total Copper (Cu)	mg/kg	86.3	85.8	46.6	109	6613753	70.4	73.7	0.50	6613022
Total Iron (Fe)	mg/kg	28300	28300	27700	29900	6613753	29200	28100	100	6613022
Total Lead (Pb)	mg/kg	38.3	37.1	18.0	64.5	6613753	35.0	34.2	0.10	6613022
Total Lithium (Li)	mg/kg	12.7	13.2	12.8	13.0	6613753	12.9	13.7	5.0	6613022
Total Magnesium (Mg)	mg/kg	6860	6820	7720	7910	6613753	7890	7250	100	6613022
Total Manganese (Mn)	mg/kg	536	532	657	643	6613753	691	614	0.20	6613022
Total Mercury (Hg)	mg/kg	0.110	0.115	0.071	0.134	6613753	0.106	0.089	0.050	6613022
Total Molybdenum (Mo)	mg/kg	2.18	2.21	0.72	3.21	6613753	2.50	1.48	0.10	6613022
Total Nickel (Ni)	mg/kg	28.2	27.4	27.5	30.1	6613753	31.3	29.9	0.80	6613022
Total Phosphorus (P)	mg/kg	520	520	794	705	6613753	732	722	10	6613022
Total Potassium (K)	mg/kg	711	699	745	771	6613753	786	796	100	6613022
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6613753	<0.50	<0.50	0.50	6613022
Total Silver (Ag)	mg/kg	0.094	0.104	0.087	0.131	6613753	0.093	0.090	0.050	6613022
Total Sodium (Na)	mg/kg	216	215	176	237	6613753	214	216	100	6613022
Total Strontium (Sr)	mg/kg	39.1	38.9	39.6	47.1	6613753	42.5	43.5	0.10	6613022
Total Thallium (Tl)	mg/kg	0.073	0.075	0.065	0.087	6613753	0.068	0.070	0.050	6613022
Total Tin (Sn)	mg/kg	3.09	2.97	1.09	5.91	6613753	2.46	2.69	0.10	6613022
Total Titanium (Ti)	mg/kg	979	972	980	977	6613753	955	971	1.0	6613022
Total Uranium (U)	mg/kg	0.752	0.782	0.540	0.794	6613753	0.661	0.551	0.050	6613022
Total Vanadium (V)	mg/kg	74.1	73.5	73.6	75.2	6613753	76.3	76.8	2.0	6613022
Total Zinc (Zn)	mg/kg	259	256	112	364	6613753	217	204	1.0	6613022
Total Zirconium (Zr)	mg/kg	3.08	3.08	3.02	3.09	6613753	3.49	3.27	0.50	6613022

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1209	FT1210	FT1211	FT1212		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-25-130228**	**SP13-26-130228**	**SP13-27-130228**	**SP13-28-130228**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	7.55	7.36	7.33	7.45	0.010	6613023
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	22300	23800	24000	23400	100	6613022
Total Antimony (Sb)	mg/kg	17.8	26.8	12.9	20.3	0.10	6613022
Total Arsenic (As)	mg/kg	43.7	50.7	25.6	40.3	0.50	6613022
Total Barium (Ba)	mg/kg	118	109	105	104	0.10	6613022
Total Beryllium (Be)	mg/kg	<0.40	0.42	0.45	<0.40	0.40	6613022
Total Bismuth (Bi)	mg/kg	0.24	0.26	0.12	0.21	0.10	6613022
Total Cadmium (Cd)	mg/kg	0.472	0.395	0.330	0.367	0.050	6613022
Total Calcium (Ca)	mg/kg	8160	7540	6450	8190	100	6613022
Total Chromium (Cr)	mg/kg	39.3	38.0	37.1	37.5	1.0	6613022
Total Cobalt (Co)	mg/kg	14.8	12.9	13.9	13.1	0.30	6613022
Total Copper (Cu)	mg/kg	142	89.4	67.8	87.1	0.50	6613022
Total Iron (Fe)	mg/kg	31000	29300	28700	29200	100	6613022
Total Lead (Pb)	mg/kg	72.0	52.5	35.1	46.0	0.10	6613022
Total Lithium (Li)	mg/kg	13.0	13.2	13.4	13.6	5.0	6613022
Total Magnesium (Mg)	mg/kg	7470	6650	7560	7440	100	6613022
Total Manganese (Mn)	mg/kg	651	562	575	582	0.20	6613022
Total Mercury (Hg)	mg/kg	0.175	0.105	0.094	0.130	0.050	6613022
Total Molybdenum (Mo)	mg/kg	3.69	2.63	1.68	2.23	0.10	6613022
Total Nickel (Ni)	mg/kg	31.3	28.7	28.6	29.1	0.80	6613022
Total Phosphorus (P)	mg/kg	708	543	613	618	10	6613022
Total Potassium (K)	mg/kg	829	741	759	775	100	6613022
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.50	6613022
Total Silver (Ag)	mg/kg	0.138	0.141	0.120	0.120	0.050	6613022
Total Sodium (Na)	mg/kg	248	222	183	227	100	6613022
Total Strontium (Sr)	mg/kg	47.9	41.8	39.3	52.3	0.10	6613022
Total Thallium (Tl)	mg/kg	0.091	0.086	0.079	0.073	0.050	6613022
Total Tin (Sn)	mg/kg	5.19	5.36	2.68	4.15	0.10	6613022
Total Titanium (Ti)	mg/kg	935	881	967	1000	1.0	6613022
Total Uranium (U)	mg/kg	0.820	0.759	0.637	0.682	0.050	6613022
Total Vanadium (V)	mg/kg	74.1	77.6	76.2	74.9	2.0	6613022
Total Zinc (Zn)	mg/kg	471	330	194	260	1.0	6613022
Total Zirconium (Zr)	mg/kg	3.43	3.86	3.54	3.58	0.50	6613022

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT1213	FT1214	FT1215	FT1216		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-29-130228**	**SP13-30-130228**	**SP13-30-01-130228**	**SP13-31-130228**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	7.43	7.35	7.33	7.47	0.010	6613023
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	23800	22600	22400	21400	100	6613022
Total Antimony (Sb)	mg/kg	12.4	11.1	9.36	23.8	0.10	6613022
Total Arsenic (As)	mg/kg	27.7	22.6	22.5	63.5	0.50	6613022
Total Barium (Ba)	mg/kg	108	101	97.7	105	0.10	6613022
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	0.40	6613022
Total Bismuth (Bi)	mg/kg	0.12	0.11	0.15	0.30	0.10	6613022
Total Cadmium (Cd)	mg/kg	0.288	0.305	0.290	0.416	0.050	6613022
Total Calcium (Ca)	mg/kg	7060	6520	7560	6920	100	6613022
Total Chromium (Cr)	mg/kg	38.1	35.8	36.4	38.2	1.0	6613022
Total Cobalt (Co)	mg/kg	13.3	12.7	12.5	14.2	0.30	6613022
Total Copper (Cu)	mg/kg	79.3	65.0	76.1	180	0.50	6613022
Total Iron (Fe)	mg/kg	29000	27300	27700	29200	100	6613022
Total Lead (Pb)	mg/kg	33.8	30.3	35.1	70.8	0.10	6613022
Total Lithium (Li)	mg/kg	13.5	12.3	13.4	12.3	5.0	6613022
Total Magnesium (Mg)	mg/kg	7260	7370	7070	7380	100	6613022
Total Manganese (Mn)	mg/kg	568	593	578	565	0.20	6613022
Total Mercury (Hg)	mg/kg	0.115	0.106	0.100	0.172	0.050	6613022
Total Molybdenum (Mo)	mg/kg	2.14	1.46	1.84	5.24	0.10	6613022
Total Nickel (Ni)	mg/kg	28.6	28.2	27.7	29.0	0.80	6613022
Total Phosphorus (P)	mg/kg	602	649	626	626	10	6613022
Total Potassium (K)	mg/kg	780	742	768	726	100	6613022
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.50	6613022
Total Silver (Ag)	mg/kg	0.096	0.086	0.126	0.129	0.050	6613022
Total Sodium (Na)	mg/kg	226	206	224	224	100	6613022
Total Strontium (Sr)	mg/kg	40.2	49.1	43.5	40.9	0.10	6613022
Total Thallium (Tl)	mg/kg	0.088	0.069	0.081	0.076	0.050	6613022
Total Tin (Sn)	mg/kg	2.46	2.21	2.94	4.75	0.10	6613022
Total Titanium (Ti)	mg/kg	966	958	952	894	1.0	6613022
Total Uranium (U)	mg/kg	0.633	0.635	0.606	0.707	0.050	6613022
Total Vanadium (V)	mg/kg	76.6	73.9	73.7	71.8	2.0	6613022
Total Zinc (Zn)	mg/kg	217	174	208	416	1.0	6613022
Total Zirconium (Zr)	mg/kg	3.75	3.55	3.54	3.34	0.50	6613022

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

TCLP METALS (SOIL)

Maxxam ID		FT1158		
Sampling Date		2013/02/27		
	UNITS	**SP13-17-130227**	**RDL**	**QC Batch**
Metals				
LEACHATE Lead (Pb)	mg/L	<0.10	0.10	6628690

RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1108	FT1109	FT1110	FT1111	FT1112		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-F1-130228**	**EXC13-F2-130228**	**EXC13-F3-130228**	**EXC13-F4-130228**	**EXC13-F5-130228**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	0.31	0.31	0.31	0.31	0.31	0.10	6610860
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6610860
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6616482
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6616482
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6616482
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Phenanthrene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Anthracene	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	6616482
Fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(a)anthracene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Chrysene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(b&j)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(a)pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Low Molecular Weight PAH`s	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6610069
High Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6610069
Total PAH	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6610069
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	77	86	76	82	84		6616482
D8-ACENAPHTHYLENE (sur.)	%	73	83	74	78	78		6616482
D8-NAPHTHALENE (sur.)	%	71	82	74	79	81		6616482
TERPHENYL-D14 (sur.)	%	81	91	82	88	90		6616482

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1113			FT1114			FT1115		
Sampling Date		2013/02/28			2013/02/28			2013/02/28		
	UNITS	**EXC13-W1-130228**	**RDL**	**QC Batch**	**EXC13-W2-130228**	**RDL**	**QC Batch**	**EXC13-W3-130228**	**RDL**	**QC Batch**
Calculated Parameters										
Index of Additive Cancer Risk(IARC)	N/A	0.48	0.10	6610860	0.38	0.10	6610860	0.31	0.10	6610860
Benzo[a]pyrene equivalency	N/A	<0.10	0.10	6610860	<0.10	0.10	6610860	<0.10	0.10	6610860
Polycyclic Aromatics										
Naphthalene	mg/kg	<0.010	0.010	6616482	<0.010	0.010	6612486	<0.010	0.010	6616482
2-Methylnaphthalene	mg/kg	<0.020	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Acenaphthylene	mg/kg	<0.0050	0.0050	6616482	<0.0050	0.0050	6612486	<0.0050	0.0050	6616482
Acenaphthene	mg/kg	<0.0050	0.0050	6616482	<0.0050	0.0050	6612486	<0.0050	0.0050	6616482
Fluorene	mg/kg	<0.020	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Phenanthrene	mg/kg	0.045	0.020	6616482	0.024	0.020	6612486	<0.020	0.020	6616482
Anthracene	mg/kg	<0.0040	0.0040	6616482	<0.0040	0.0040	6612486	<0.0040	0.0040	6616482
Fluoranthene	mg/kg	0.068	0.020	6616482	0.028	0.020	6612486	<0.020	0.020	6616482
Pyrene	mg/kg	0.056	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Benzo(a)anthracene	mg/kg	<0.020	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Chrysene	mg/kg	0.035	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Benzo(b&j)fluoranthene	mg/kg	0.036	0.020	6616482	0.021	0.020	6612486	<0.020	0.020	6616482
Benzo(k)fluoranthene	mg/kg	<0.020	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Benzo(a)pyrene	mg/kg	<0.020	0.020	6616482	<0.020	0.020	6612486	<0.020	0.020	6616482
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.050	6616482	<0.050	0.050	6612486	<0.050	0.050	6616482
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	6616482	<0.050	0.050	6612486	<0.050	0.050	6616482
Benzo(g,h,i)perylene	mg/kg	<0.050	0.050	6616482	<0.050	0.050	6612486	<0.050	0.050	6616482
Low Molecular Weight PAH`s	mg/kg	0.045	0.020	6610069	<0.050	0.050	6610069	<0.020	0.020	6610069
High Molecular Weight PAH`s	mg/kg	0.22	0.050	6610069	<0.050	0.050	6610069	<0.050	0.050	6610069
Total PAH	mg/kg	0.26	0.050	6610069	0.073	0.050	6610069	<0.050	0.050	6610069
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	84		6616482	91		6612486	84		6616482
D8-ACENAPHTHYLENE (sur.)	%	81		6616482	89		6612486	79		6616482
D8-NAPHTHALENE (sur.)	%	80		6616482	77		6612486	79		6616482
TERPHENYL-D14 (sur.)	%	90		6616482	74		6612486	89		6616482

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1115	FT1116	FT1117	FT1155		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**EXC13-W3-130228 Lab-Dup**	**EXC13-W4-130228**	**EXC13-W5-130228**	**EXC13-W6-130228**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A		0.31	0.31	0.31	0.10	6610860
Benzo[a]pyrene equivalency	N/A		<0.10	<0.10	<0.10	0.10	6610860
Polycyclic Aromatics							
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.010	6616482
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6616482
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6616482
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Phenanthrene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Anthracene	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	6616482
Fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.020	0.020	6616482
Pyrene	mg/kg	<0.020	<0.020	<0.020	0.032	0.020	6616482
Benzo(a)anthracene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Chrysene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(b&j)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Benzo(a)pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6616482
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6616482
Low Molecular Weight PAH`s	mg/kg		<0.020	<0.020	<0.020	0.020	6610069
High Molecular Weight PAH`s	mg/kg		<0.050	<0.050	0.052	0.050	6610069
Total PAH	mg/kg		<0.050	<0.050	0.052	0.050	6610069
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	82	80	78	76		6616482
D8-ACENAPHTHYLENE (sur.)	%	76	75	74	73		6616482
D8-NAPHTHALENE (sur.)	%	76	75	76	75		6616482
TERPHENYL-D14 (sur.)	%	86	84	86	84		6616482

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1156	FT1157	FT1158	FT1159	FT1160	FT1161		
Sampling Date		2013/02/28	2013/02/27	2013/02/27	2013/02/27	2013/02/28	2013/02/28		
	UNITS	**EXC13-W7-130228**	**SP13-16-130227**	**SP13-17-130227**	**SP13-18-130227**	**SP13-19-130228**	**SP13-20-130228**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.31	2.2	3.1	2.6	2.5	1.2	0.10	6610860
Benzo[a]pyrene equivalency	N/A	<0.10	0.19	0.26	0.21	0.22	0.10	0.10	6610860
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	0.047	0.051	0.016	0.019	0.012	0.010	6612486
2-Methylnaphthalene	mg/kg	<0.020	0.058	0.035	<0.020	<0.020	<0.020	0.020	6612486
Acenaphthylene	mg/kg	<0.0050	0.020	0.019	0.016	0.015	0.010	0.0050	6612486
Acenaphthene	mg/kg	<0.0050	0.030	0.061	0.014	0.027	0.012	0.0050	6612486
Fluorene	mg/kg	<0.020	0.029	0.062	<0.020	0.025	<0.020	0.020	6612486
Phenanthrene	mg/kg	<0.020	0.12	0.34	0.092	0.22	0.069	0.020	6612486
Anthracene	mg/kg	<0.0040	0.046	0.11	0.032	0.060	0.023	0.0040	6612486
Fluoranthene	mg/kg	<0.020	0.21	0.43	0.18	0.35	0.12	0.020	6612486
Pyrene	mg/kg	<0.020	0.18	0.39	0.16	0.32	0.12	0.020	6612486
Benzo(a)anthracene	mg/kg	<0.020	0.099	0.17	0.099	0.14	0.050	0.020	6612486
Chrysene	mg/kg	<0.020	0.13	0.20	0.16	0.16	0.066	0.020	6612486
Benzo(b&j)fluoranthene	mg/kg	<0.020	0.16	0.22	0.21	0.17	0.083	0.020	6612486
Benzo(k)fluoranthene	mg/kg	<0.020	0.053	0.077	0.068	0.069	0.026	0.020	6612486
Benzo(a)pyrene	mg/kg	<0.020	0.12	0.17	0.13	0.14	0.059	0.020	6612486
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.064	0.096	0.075	0.077	<0.050	0.050	6612486
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6612486
Benzo(g,h,i)perylene	mg/kg	<0.050	0.077	0.11	0.085	0.086	<0.050	0.050	6612486
Low Molecular Weight PAH`s	mg/kg	<0.050	0.35	0.68	0.17	0.36	0.13	0.050	6610069
High Molecular Weight PAH`s	mg/kg	<0.050	1.2	2.0	1.3	1.6	0.58	0.050	6610069
Total PAH	mg/kg	<0.050	1.5	2.7	1.5	2.0	0.71	0.050	6610069
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	86	99	82	93	86	90		6612486
D8-ACENAPHTHYLENE (sur.)	%	79	90	83	79	80	83		6612486
D8-NAPHTHALENE (sur.)	%	89	77	90	87	92	71		6612486
TERPHENYL-D14 (sur.)	%	89	78	90	98	91	90		6612486

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1162		FT1163	FT1164	FT1207	FT1208		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-21-130228**	**RDL**	**SP13-22-130228**	**SP13-20-01-130228**	**SP13-23-130228**	**SP13-24-130228**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	3.7	0.10	0.66	1.7	1.9	0.76	0.10	6610860
Benzo[a]pyrene equivalency	N/A	0.31	0.10	<0.10	0.15	0.16	<0.10	0.10	6610860
Polycyclic Aromatics									
Naphthalene	mg/kg	0.17	0.010	<0.010	0.018	0.019	<0.010	0.010	6612486
2-Methylnaphthalene	mg/kg	0.72	0.020	<0.020	<0.020	<0.020	<0.020	0.020	6612486
Acenaphthylene	mg/kg	<0.031(1)	0.031	0.0053	0.019	0.012	0.0071	0.0050	6612486
Acenaphthene	mg/kg	<0.063(1)	0.063	0.0054	0.014	0.016	0.0083	0.0050	6612486
Fluorene	mg/kg	0.12	0.020	<0.020	<0.020	<0.020	<0.020	0.020	6612486
Phenanthrene	mg/kg	0.31	0.020	0.047	0.095	0.12	0.059	0.020	6612486
Anthracene	mg/kg	0.083	0.0040	0.012	0.032	0.034	0.014	0.0040	6612486
Fluoranthene	mg/kg	0.43	0.020	0.076	0.17	0.18	0.084	0.020	6612486
Pyrene	mg/kg	0.44	0.020	0.074	0.17	0.16	0.091	0.020	6612486
Benzo(a)anthracene	mg/kg	0.19	0.020	0.028	0.081	0.087	0.036	0.020	6612486
Chrysene	mg/kg	0.27	0.020	0.036	0.095	0.12	0.046	0.020	6612486
Benzo(b&j)fluoranthene	mg/kg	0.27	0.020	0.046	0.13	0.14	0.054	0.020	6612486
Benzo(k)fluoranthene	mg/kg	0.087	0.020	<0.020	0.040	0.046	<0.020	0.020	6612486
Benzo(a)pyrene	mg/kg	0.21	0.020	0.032	0.094	0.10	0.039	0.020	6612486
Indeno(1,2,3-cd)pyrene	mg/kg	0.12	0.050	<0.050	0.055	0.056	<0.050	0.050	6612486
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	0.050	6612486
Benzo(g,h,i)perylene	mg/kg	0.16	0.050	<0.050	0.060	0.064	<0.050	0.050	6612486
Low Molecular Weight PAH`s	mg/kg	1.4	0.063	0.070	0.18	0.20	0.088	0.050	6610069
High Molecular Weight PAH`s	mg/kg	2.3	0.050	0.32	0.98	1.0	0.38	0.050	6610069
Total PAH	mg/kg	3.8	0.063	0.39	1.2	1.2	0.47	0.050	6610069
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	88		88	90	83	98		6612486
D8-ACENAPHTHYLENE (sur.)	%	82		83	83	78	89		6612486
D8-NAPHTHALENE (sur.)	%	89		91	91	67	79		6612486
TERPHENYL-D14 (sur.)	%	93		94	95	65	102		6612486

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1209	FT1209	FT1210	FT1211	FT1212		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-25-130228**	**SP13-25-130228 Lab-Dup**	**SP13-26-130228**	**SP13-27-130228**	**SP13-28-130228**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	1.4		1.3	2.1	1.2	0.10	6610860
Benzo[a]pyrene equivalency	N/A	0.12		0.11	0.18	0.11	0.10	6610860
Polycyclic Aromatics								
Naphthalene	mg/kg	0.059(1)	0.023	0.039	0.016	0.023	0.010	6612486
2-Methylnaphthalene	mg/kg	0.052	0.029	0.047	0.064	0.059	0.020	6612486
Acenaphthylene	mg/kg	0.014	0.016	0.011	0.020	0.012	0.0050	6612486
Acenaphthene	mg/kg	0.035(2)	0.023	0.025	0.021	0.017	0.0050	6612486
Fluorene	mg/kg	0.036(2)	0.023	0.025	0.035	0.025	0.020	6612486
Phenanthrene	mg/kg	0.14(2)	0.12	0.097	0.11	0.10	0.020	6612486
Anthracene	mg/kg	0.028(2)	0.038	0.029	0.048	0.027	0.0040	6612486
Fluoranthene	mg/kg	0.16(2)	0.20	0.14	0.19	0.14	0.020	6612486
Pyrene	mg/kg	0.16(2)	0.19	0.13	0.20	0.14	0.020	6612486
Benzo(a)anthracene	mg/kg	0.064(2)	0.084	0.060	0.092	0.054	0.020	6612486
Chrysene	mg/kg	0.080(2)	0.10	0.071	0.12	0.071	0.020	6612486
Benzo(b&j)fluoranthene	mg/kg	0.10(2)	0.13	0.092	0.15	0.079	0.020	6612486
Benzo(b)fluoranthene	mg/kg	0.062	0.079				0.020	6612486
Benzo(k)fluoranthene	mg/kg	0.031	0.040	0.031	0.051	0.031	0.020	6612486
Benzo(a)pyrene	mg/kg	0.072(2)	0.094	0.068	0.12	0.061	0.020	6612486
Perylene	mg/kg	<0.050	<0.050				0.050	6612486
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.053	<0.050	0.064	<0.050	0.050	6612486
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6612486
Benzo(g,h,i)perylene	mg/kg	<0.050	0.061	<0.050	0.072	<0.050	0.050	6612486
Low Molecular Weight PAH`s	mg/kg	0.36		0.27	0.32	0.26	0.050	6610069
High Molecular Weight PAH`s	mg/kg	0.73		0.65	1.2	0.62	0.050	6610069
Total PAH	mg/kg	1.1		0.93	1.5	0.89	0.050	6610069
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	85	88	92	96	92		6612486
D8-ACENAPHTHYLENE (sur.)	%	79	81	86	90	85		6612486
D8-NAPHTHALENE (sur.)	%	65	70	75	78	73		6612486
TERPHENYL-D14 (sur.)	%	87	87	93	98	93		6612486

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit
(2) - Matrix spike recovery above control limit

Maxxam

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FT1213		FT1214	FT1215	FT1216		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28		
	UNITS	**SP13-29-130228**	**RDL**	**SP13-30-130228**	**SP13-30-01-130228**	**SP13-31-130228**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	2.3	0.10	0.98	1.2	2.5	0.10	6610860
Benzo[a]pyrene equivalency	N/A	0.21	0.10	<0.10	0.11	0.20	0.10	6610860
Polycyclic Aromatics								
Naphthalene	mg/kg	0.015	0.010	0.011	<0.010	0.045	0.010	6612486
2-Methylnaphthalene	mg/kg	0.034	0.020	<0.020	<0.020	0.047	0.020	6612486
Acenaphthylene	mg/kg	0.015	0.0050	0.0092	0.0085	0.021	0.0050	6612486
Acenaphthene	mg/kg	<0.023(1)	0.023	0.012	0.015	0.031	0.0050	6612486
Fluorene	mg/kg	<0.070(1)	0.070	<0.020	<0.020	0.034	0.020	6612486
Phenanthrene	mg/kg	0.096	0.020	0.093	0.098	0.14	0.020	6612486
Anthracene	mg/kg	<0.023(1)	0.023	0.020	0.027	0.032	0.0040	6612486
Fluoranthene	mg/kg	0.22	0.020	0.11	0.15	0.23	0.020	6612486
Pyrene	mg/kg	0.59	0.020	0.11	0.14	0.24	0.020	6612486
Benzo(a)anthracene	mg/kg	0.12	0.020	0.040	0.057	0.12	0.020	6612486
Chrysene	mg/kg	0.27	0.020	0.051	0.065	0.16	0.020	6612486
Benzo(b&j)fluoranthene	mg/kg	0.16	0.020	0.070	0.085	0.20	0.020	6612486
Benzo(b)fluoranthene	mg/kg	0.11	0.020			0.12	0.020	6612486
Benzo(k)fluoranthene	mg/kg	0.047	0.020	0.022	0.026	0.056	0.020	6612486
Benzo(a)pyrene	mg/kg	0.14	0.020	0.051	0.066	0.13	0.020	6612486
Perylene	mg/kg	0.18	0.050			<0.050	0.050	6612486
Indeno(1,2,3-cd)pyrene	mg/kg	0.059	0.050	<0.050	<0.050	0.072	0.050	6612486
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	<0.050	<0.050	0.050	6612486
Benzo(g,h,i)perylene	mg/kg	0.092	0.050	<0.050	<0.050	0.078	0.050	6612486
Low Molecular Weight PAH`s	mg/kg	0.16	0.070	0.15	0.15	0.35	0.050	6610069
High Molecular Weight PAH`s	mg/kg	1.8	0.050	0.50	0.64	1.4	0.050	6610069
Total PAH	mg/kg	2.0	0.070	0.64	0.79	1.8	0.050	6610069
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	92		101	96	91		6612486
D8-ACENAPHTHYLENE (sur.)	%	85		91	90	85		6612486
D8-NAPHTHALENE (sur.)	%	75		79	78	74		6612486
TERPHENYL-D14 (sur.)	%	90		101	97	92		6612486

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1108			FT1109	FT1109			FT1110		
Sampling Date		2013/02/28			2013/02/28	2013/02/28			2013/02/28		
	UNITS	**EXC13-F1-130228**	**RDL**	**QC Batch**	**EXC13-F2-130228**	**EXC13-F2-130228 Lab-Dup**	**RDL**	**QC Batch**	**EXC13-F3-130228**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	66	10	6620924	32	29	10	6620924	46	10	6620924
Soluble Chloride (Cl)	mg/L	26.8	5.0	6620923	36.4	48.8	5.0	6625944	37.3	5.0	6620923
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	11.9	2.2	6610862	13.3		1.8	6610862	14.3	1.9	6610862
Soluble Sodium (Na)	mg/kg	8.8	2.2	6610862	8.9		1.8	6610862	11.6	1.9	6610862
Soluble Parameters											
Soluble Conductivity	uS/cm	279	1.0	6614670	256	291	1.0	6614670	336	1.0	6614670
Soluble pH	pH Units	7.25	N/A	6614661	7.84	7.77	N/A	6614661	7.71	N/A	6614661
Wet Soluble Calcium (Ca)	mg/L	34.9	5.0	6618148	26.5	31.5	5.0	6618148	39.6	5.0	6618148
Saturation %	%	44.5	1.0	6614576	36.5	36.5	1.0	6614576	38.4	1.0	6614576
Wet Soluble Magnesium (Mg)	mg/L	8.1	5.0	6618148	8.0	8.8	5.0	6618148	9.0	5.0	6618148
Wet Soluble Potassium (K)	mg/L	<20	20	6618148	<20	<20	20	6618148	<20	20	6618148
Wet Soluble Sodium (Na)	mg/L	19.7	5.0	6618148	24.3	25.4	5.0	6618148	30.2	5.0	6618148
Wet Soluble Sulphur (S)	mg/L	<30	30	6618148	<30	<30	30	6618148	<30	30	6618148
Sodium Adsorption Ratio	N/A	0.78	0.10	6610861	1.06		0.10	6610861	1.13	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1111		FT1112		FT1113			FT1114		
Sampling Date		2013/02/28		2013/02/28		2013/02/28			2013/02/28		
	UNITS	**EXC13-F4-130228**	**RDL**	**EXC13-F5-130228**	**RDL**	**EXC13-W1-130228**	**RDL**	**QC Batch**	**EXC13-W2-130228**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	62	10	53	10	<10	10	6620924	10	10	6625951
Soluble Chloride (Cl)	mg/L	22.0	5.0	34.3	5.0	25.0	5.0	6620923	25.8	5.0	6625944
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	9.6	2.2	17.9	2.6	14.0	2.8	6610862	13.2	2.5	6610862
Soluble Sodium (Na)	mg/kg	10.0	2.2	11.5	2.6	12.0	2.8	6610862	10.3	2.5	6610862
Soluble Parameters											
Soluble Conductivity	uS/cm	270	1.0	383	1.0	254	1.0	6614670	241	1.0	6619620
Soluble pH	pH Units	5.81	N/A	7.07	N/A	6.26	N/A	6614661	6.39	N/A	6619618
Wet Soluble Calcium (Ca)	mg/L	20.8	5.0	55.9	5.0	35.4	5.0	6618148	35.5	5.0	6623530
Saturation %	%	43.5	1.0	52.1	1.0	56.1	1.0	6614576	51.0	1.0	6619605
Wet Soluble Magnesium (Mg)	mg/L	12.5	5.0	8.8	5.0	7.7	5.0	6618148	12.6	5.0	6623530
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	6618148	<20	20	6623530
Wet Soluble Sodium (Na)	mg/L	23.0	5.0	22.0	5.0	21.3	5.0	6618148	20.3	5.0	6623530
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	6618148	<30	30	6623530
Sodium Adsorption Ratio	N/A	0.98	0.10	0.72	0.10	0.85	0.10	6610861	0.74	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1115		FT1116		FT1117	FT1117		FT1155		
Sampling Date		2013/02/28		2013/02/28		2013/02/28	2013/02/28		2013/02/28		
	UNITS	**EXC13-W3-130228**	**RDL**	**EXC13-W4-130228**	**RDL**	**EXC13-W5-130228**	**EXC13-W5-130228 Lab-Dup**	**RDL**	**EXC13-W6-130228**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	<10	10	<10	10	31	33	10	16	10	6625951
Soluble Chloride (Cl)	mg/L	13.9	5.0	10.9	5.0	24.0	21.3	5.0	19.1	5.0	6625944
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	7.4	2.7	6.4	2.9	12.3		2.6	10.4	2.7	6610862
Soluble Sodium (Na)	mg/kg	3.6	2.7	3.7	2.9	13.4		2.6	8.2	2.7	6610862
Soluble Parameters											
Soluble Conductivity	uS/cm	186	1.0	178	1.0	329	329	1.0	279	1.0	6619620
Soluble pH	pH Units	7.46	N/A	7.43	N/A	7.30	7.32	N/A	7.28	N/A	6619618
Wet Soluble Calcium (Ca)	mg/L	30.9	5.0	29.5	5.0	53.6	52.2	5.0	45.2	5.0	6623530
Saturation %	%	53.5	1.0	58.7	1.0	51.2	51.0	1.0	54.5	1.0	6619605
Wet Soluble Magnesium (Mg)	mg/L	6.9	5.0	5.3	5.0	11.2	8.7	5.0	8.4	5.0	6623530
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	20	<20	20	6623530
Wet Soluble Sodium (Na)	mg/L	6.8	5.0	6.2	5.0	26.1	25.6	5.0	15.1	5.0	6623530
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	<30	30	<30	30	6623530
Sodium Adsorption Ratio	N/A	0.29	0.10	0.28	0.10	0.85		0.10	0.54	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/12

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Client Project #: 511828
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SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1156			FT1157		FT1158		FT1159		
Sampling Date		2013/02/28			2013/02/27		2013/02/27		2013/02/27		
	UNITS	**EXC13-W7-130228**	**RDL**	**QC Batch**	**SP13-16-130227**	**RDL**	**SP13-17-130227**	**RDL**	**SP13-18-130227**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	81	10	6625951	30	10	32	10	28	10	6614925
Soluble Chloride (Cl)	mg/L	20.6	5.0	6625944	27.7	5.0	21.3	5.0	22.4	5.0	6614922
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	10.9	2.6	6610862	13.9	2.5	12.6	3.0	11.8	2.6	6610862
Soluble Sodium (Na)	mg/kg	12.6	2.6	6610862	7.8	2.5	8.9	3.0	7.0	2.6	6610862
Soluble Parameters											
Soluble Conductivity	uS/cm	329	1.0	6619620	315	1.0	333	1.0	305	1.0	6612986
Soluble pH	pH Units	6.84	N/A	6619618	7.89	N/A	7.31	N/A	7.19	N/A	6612984
Wet Soluble Calcium (Ca)	mg/L	36.1	5.0	6623530	47.6	5.0	51.7	5.0	46.4	5.0	6614559
Saturation %	%	52.6	1.0	6619605	50.3	1.0	59.1	1.0	52.6	1.0	6612981
Wet Soluble Magnesium (Mg)	mg/L	7.0	5.0	6623530	10.8	5.0	10.3	5.0	11.3	5.0	6614559
Wet Soluble Potassium (K)	mg/L	<20	20	6623530	<20	20	<20	20	<20	20	6614559
Wet Soluble Sodium (Na)	mg/L	24.0	5.0	6623530	15.6	5.0	15.0	5.0	13.3	5.0	6614559
Wet Soluble Sulphur (S)	mg/L	<30	30	6623530	<30	30	<30	30	<30	30	6614559
Sodium Adsorption Ratio	N/A	0.96	0.10	6610861	0.53	0.10	0.50	0.10	0.45	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1160		FT1161		FT1162		FT1163		
Sampling Date		2013/02/28		2013/02/28		2013/02/28		2013/02/28		
	UNITS	**SP13-19-130228**	**RDL**	**SP13-20-130228**	**RDL**	**SP13-21-130228**	**RDL**	**SP13-22-130228**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	32	10	29	10	30	10	<10	10	6614925
Soluble Chloride (Cl)	mg/L	17.9	5.0	19.7	5.0	21.8	5.0	14.8	5.0	6614922
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	10.9	3.0	11.2	2.8	12.9	2.9	8.9	3.0	6610862
Soluble Sodium (Na)	mg/kg	7.7	3.0	7.7	2.8	8.5	2.9	5.7	3.0	6610862
Soluble Parameters										
Soluble Conductivity	uS/cm	287	1.0	306	1.0	299	1.0	249	1.0	6612986
Soluble pH	pH Units	7.32	N/A	7.24	N/A	7.88	N/A	7.79	N/A	6612984
Wet Soluble Calcium (Ca)	mg/L	46.8	5.0	49.0	5.0	45.4	5.0	44.5	5.0	6614559
Saturation %	%	61.0	1.0	56.8	1.0	59.0	1.0	59.9	1.0	6612981
Wet Soluble Magnesium (Mg)	mg/L	8.1	5.0	10.4	5.0	10.0	5.0	8.0	5.0	6614559
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6614559
Wet Soluble Sodium (Na)	mg/L	12.5	5.0	13.6	5.0	14.4	5.0	9.5	5.0	6614559
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6614559
Sodium Adsorption Ratio	N/A	0.45	0.10	0.46	0.10	0.50	0.10	0.35	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/12

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SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1163		FT1164		FT1207		FT1208		
Sampling Date		2013/02/28		2013/02/28		2013/02/28		2013/02/28		
	UNITS	**SP13-22-130228 Lab-Dup**	**RDL**	**SP13-20-01-130228**	**RDL**	**SP13-23-130228**	**RDL**	**SP13-24-130228**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	<10	10	32	10	13	10	15	10	6614925
Soluble Chloride (Cl)	mg/L	15.6	5.0	18.9	5.0	18.1	5.0	17.3	5.0	6614922
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg		3.0	9.1	2.4	9.2	2.5	9.3	2.7	6610862
Soluble Sodium (Na)	mg/kg		3.0	6.3	2.4	5.6	2.5	5.2	2.7	6610862
Soluble Parameters										
Soluble Conductivity	uS/cm	249	1.0	317	1.0	330	1.0	239	1.0	6612986
Soluble pH	pH Units	7.81	N/A	7.21	N/A	6.98	N/A	6.96	N/A	6612984
Wet Soluble Calcium (Ca)	mg/L	43.9	5.0	49.2	5.0	56.2	5.0	36.5	5.0	6614559
Saturation %	%	60.1	1.0	47.9	1.0	50.7	1.0	53.7	1.0	6612981
Wet Soluble Magnesium (Mg)	mg/L	8.0	5.0	9.6	5.0	10.6	5.0	9.7	5.0	6614559
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6614559
Wet Soluble Sodium (Na)	mg/L	9.6	5.0	13.2	5.0	11.1	5.0	9.7	5.0	6614559
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6614559
Sodium Adsorption Ratio	N/A		0.10	0.45	0.10	0.36	0.10	0.37	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/12

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Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1209		FT1210		FT1211		FT1212		
Sampling Date		2013/02/28		2013/02/28		2013/02/28		2013/02/28		
	UNITS	**SP13-25-130228**	**RDL**	**SP13-26-130228**	**RDL**	**SP13-27-130228**	**RDL**	**SP13-28-130228**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	42	10	12	10	11	10	17	10	6614925
Soluble Chloride (Cl)	mg/L	29.1	5.0	32.1	5.0	23.2	5.0	26.0	5.0	6614922
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	14.0	2.4	15.8	2.5	13.5	2.9	11.6	2.2	6610862
Soluble Sodium (Na)	mg/kg	7.8	2.4	8.8	2.5	7.8	2.9	8.0	2.2	6610862
Soluble Parameters										
Soluble Conductivity	uS/cm	376	1.0	325	1.0	340	1.0	313	1.0	6612986
Soluble pH	pH Units	7.80	N/A	6.94	N/A	7.02	N/A	7.15	N/A	6612984
Wet Soluble Calcium (Ca)	mg/L	56.4	5.0	39.7	5.0	53.4	5.0	43.3	5.0	6614559
Saturation %	%	48.2	1.0	49.1	1.0	58.2	1.0	44.7	1.0	6612981
Wet Soluble Magnesium (Mg)	mg/L	11.8	5.0	9.9	5.0	10.6	5.0	11.9	5.0	6614559
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6614559
Wet Soluble Sodium (Na)	mg/L	16.2	5.0	17.9	5.0	13.4	5.0	17.8	5.0	6614559
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6614559
Sodium Adsorption Ratio	N/A	0.51	0.10	0.66	0.10	0.44	0.10	0.62	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT1213		FT1214		FT1215		FT1216		
Sampling Date		2013/02/28		2013/02/28		2013/02/28		2013/02/28		
	UNITS	**SP13-29-130228**	**RDL**	**SP13-30-130228**	**RDL**	**SP13-30-01-130228**	**RDL**	**SP13-31-130228**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	10	10	11	10	13	10	33	10	6614925
Soluble Chloride (Cl)	mg/L	20.3	5.0	20.2	5.0	20.6	5.0	23.3	5.0	6614922
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	11.4	2.8	10.5	2.6	11.2	2.7	13.0	2.8	6610862
Soluble Sodium (Na)	mg/kg	7.6	2.8	6.1	2.6	7.3	2.7	9.2	2.8	6610862
Soluble Parameters										
Soluble Conductivity	uS/cm	291	1.0	265	1.0	315	1.0	339	1.0	6612986
Soluble pH	pH Units	7.11	N/A	7.00	N/A	7.01	N/A	7.06	N/A	6612984
Wet Soluble Calcium (Ca)	mg/L	46.0	5.0	43.0	5.0	50.7	5.0	48.0	5.0	6614559
Saturation %	%	56.2	1.0	51.7	1.0	54.5	1.0	55.9	1.0	6612981
Wet Soluble Magnesium (Mg)	mg/L	10.0	5.0	10.0	5.0	10.5	5.0	10.8	5.0	6614559
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6614559
Wet Soluble Sodium (Na)	mg/L	13.6	5.0	11.7	5.0	13.3	5.0	16.5	5.0	6614559
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6614559
Sodium Adsorption Ratio	N/A	0.47	0.10	0.42	0.10	0.45	0.10	0.56	0.10	6610861

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
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Package 1	1.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

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Maxxam Job #: B316165
Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6611354	Moisture	2013/03/02					<0.30	%	5.4	20		
6611364	Moisture	2013/03/02					<0.30	%	0.5	20		
6611547	Moisture	2013/03/02					<0.30	%	2.9	20		
6612405	1,4-Difluorobenzene (sur.)	2013/03/01	104	70 - 130	103	70 - 130	104	%				
6612405	4-BROMOFLUOROBENZENE (sur.)	2013/03/01	98	70 - 130	98	70 - 130	95	%				
6612405	D10-ETHYLBENZENE (sur.)	2013/03/01	95	50 - 130	87	50 - 130	93	%				
6612405	D4-1,2-DICHLOROETHANE (sur.)	2013/03/01	101	70 - 130	98	70 - 130	100	%				
6612405	Benzene	2013/03/02	105	60 - 140	90	60 - 140	<0.0050	mg/kg	NC	40		
6612405	Toluene	2013/03/02	97	60 - 140	86	60 - 140	<0.020	mg/kg	NC	40		
6612405	Ethylbenzene	2013/03/02	106	60 - 140	95	60 - 140	<0.010	mg/kg	NC	40		
6612405	m & p-Xylene	2013/03/02	107	60 - 140	96	60 - 140	<0.040	mg/kg	NC	40		
6612405	o-Xylene	2013/03/02	110	60 - 140	98	60 - 140	<0.040	mg/kg	NC	40		
6612405	(C6-C10)	2013/03/01			81	60 - 140	<10	mg/kg				
6612405	Methyl-tert-butylether(MTBE)	2013/03/02					<0.10	mg/kg	NC	40		
6612405	Styrene	2013/03/02					<0.030	mg/kg	NC	40		
6612405	Xylenes (Total)	2013/03/02					<0.040	mg/kg	NC	40		
6612486	D10-ANTHRACENE (sur.)	2013/03/01	83	60 - 130	95	60 - 130	93	%				
6612486	D8-ACENAPHTHYLENE (sur.)	2013/03/01	83	50 - 130	91	50 - 130	89	%				
6612486	D8-NAPHTHALENE (sur.)	2013/03/01	72	50 - 130	105	50 - 130	68	%				
6612486	TERPHENYL-D14 (sur.)	2013/03/01	85	60 - 130	99	60 - 130	97	%				
6612486	Naphthalene	2013/03/02	82	50 - 130	97	50 - 130	<0.010	mg/kg	NC	50		
6612486	2-Methylnaphthalene	2013/03/02	93	50 - 130	98	50 - 130	<0.020	mg/kg	NC	50		
6612486	Acenaphthylene	2013/03/02	86	50 - 130	86	50 - 130	<0.0050	mg/kg	NC	50		
6612486	Acenaphthene	2013/03/02	145(1)	50 - 130	91	50 - 130	<0.0050	mg/kg	NC	50		
6612486	Fluorene	2013/03/02	151(1)	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6612486	Phenanthrene	2013/03/02	344(1)	60 - 130	89	60 - 130	<0.020	mg/kg	13.9	50		
6612486	Anthracene	2013/03/02	181(1)	60 - 130	92	60 - 130	<0.0040	mg/kg	29.0	50		
6612486	Fluoranthene	2013/03/02	286(1)	60 - 130	94	60 - 130	<0.020	mg/kg	19.2	50		
6612486	Pyrene	2013/03/02	262(1)	60 - 130	94	60 - 130	<0.020	mg/kg	19.4	50		
6612486	Benzo(a)anthracene	2013/03/02	148(1)	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
6612486	Chrysene	2013/03/02	148(1)	60 - 130	83	60 - 130	<0.020	mg/kg	NC	50		
6612486	Benzo(b&j)fluoranthene	2013/03/02	155(1)	60 - 130	86	60 - 130	<0.020	mg/kg	23.9	50		
6612486	Benzo(k)fluoranthene	2013/03/02	96	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
6612486	Benzo(a)pyrene	2013/03/02	147(1)	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
6612486	Perylene	2013/03/02	108	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6612486	Indeno(1,2,3-cd)pyrene	2013/03/02	114	60 - 130	83	60 - 130	<0.050	mg/kg	NC	50		
6612486	Dibenz(a,h)anthracene	2013/03/02	92	60 - 130	78	60 - 130	<0.050	mg/kg	NC	50		
6612486	Benzo(g,h,i)perylene	2013/03/02	118	60 - 130	80	60 - 130	<0.050	mg/kg	NC	50		
6612486	Benzo(b)fluoranthene	2013/03/02					<0.020	mg/kg	NC	N/A		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6612766	1,4-Difluorobenzene (sur.)	2013/03/01	99	70 - 130	100	70 - 130	101	%				
6612766	4-BROMOFLUOROBENZENE (sur.)	2013/03/01	103	70 - 130	100	70 - 130	96	%				
6612766	D10-ETHYLBENZENE (sur.)	2013/03/01	93	50 - 130	88	50 - 130	93	%				
6612766	D4-1,2-DICHLOROETHANE (sur.)	2013/03/01	97	70 - 130	100	70 - 130	98	%				
6612766	Benzene	2013/03/02	97	60 - 140	91	60 - 140	<0.0050	mg/kg	NC	40		
6612766	Toluene	2013/03/02	104	60 - 140	97	60 - 140	<0.020	mg/kg	NC	40		
6612766	Ethylbenzene	2013/03/02	104	60 - 140	96	60 - 140	<0.010	mg/kg	NC	40		
6612766	m & p-Xylene	2013/03/02	102	60 - 140	95	60 - 140	<0.040	mg/kg	NC	40		
6612766	o-Xylene	2013/03/02	104	60 - 140	96	60 - 140	<0.040	mg/kg	NC	40		
6612766	(C6-C10)	2013/03/02			89	60 - 140	<10	mg/kg	NC	40		
6612766	Methyl-tert-butylether(MTBE)	2013/03/02					<0.10	mg/kg	NC	40		
6612766	Styrene	2013/03/02					<0.030	mg/kg	NC	40		
6612766	Xylenes (Total)	2013/03/02					<0.040	mg/kg	NC	40		
6612981	Saturation %	2013/03/02			104	80 - 120	<1.0	%	0.4	30		
6612984	Soluble pH	2013/03/02			102	97 - 103			0.3	20		
6612986	Soluble Conductivity	2013/03/04			96	70 - 130	<1.0	uS/cm	0	35		
6613022	Total Antimony (Sb)	2013/03/04	96	75 - 125	99	75 - 125	<0.10	mg/kg	0.6	30	96	70 - 130
6613022	Total Arsenic (As)	2013/03/04	105	75 - 125	102	75 - 125	<0.50	mg/kg	2.4	30	98	70 - 130
6613022	Total Barium (Ba)	2013/03/04	NC	75 - 125	103	75 - 125	<0.10	mg/kg	1.5	35	106	70 - 130
6613022	Total Beryllium (Be)	2013/03/04	102	75 - 125	93	75 - 125	<0.40	mg/kg	NC	30		
6613022	Total Cadmium (Cd)	2013/03/04	112	75 - 125	104	75 - 125	<0.050	mg/kg	3.0	30	107	70 - 130
6613022	Total Chromium (Cr)	2013/03/04	NC	75 - 125	103	75 - 125	<1.0	mg/kg	1.1	30	100	70 - 130
6613022	Total Cobalt (Co)	2013/03/04	103	75 - 125	104	75 - 125	<0.30	mg/kg	0.8	30	93	70 - 130
6613022	Total Copper (Cu)	2013/03/04	NC	75 - 125	105	75 - 125	<0.50	mg/kg	1	30	88	70 - 130
6613022	Total Lead (Pb)	2013/03/04	NC	75 - 125	107	75 - 125	<0.10	mg/kg	0.8	35	105	70 - 130
6613022	Total Lithium (Li)	2013/03/04	101	75 - 125	99	75 - 125	<5.0	mg/kg				
6613022	Total Manganese (Mn)	2013/03/04	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.8	30	101	70 - 130
6613022	Total Mercury (Hg)	2013/03/04	113	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35	91	70 - 130
6613022	Total Molybdenum (Mo)	2013/03/04	106	75 - 125	103	75 - 125	<0.10	mg/kg	3.7	35	114	70 - 130
6613022	Total Nickel (Ni)	2013/03/04	108	75 - 125	101	75 - 125	<0.80	mg/kg	1.8	30	92	70 - 130
6613022	Total Selenium (Se)	2013/03/04	120	75 - 125	108	75 - 125	<0.50	mg/kg	NC	30		
6613022	Total Silver (Ag)	2013/03/04	104	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35		
6613022	Total Strontium (Sr)	2013/03/04	107	75 - 125	104	75 - 125	<0.10	mg/kg	0.8	35	106	70 - 130
6613022	Total Thallium (Tl)	2013/03/04	101	75 - 125	102	75 - 125	<0.050	mg/kg	NC	30	97	70 - 130
6613022	Total Tin (Sn)	2013/03/04	99	75 - 125	100	75 - 125	<0.10	mg/kg	0.5	35		
6613022	Total Titanium (Ti)	2013/03/04	NC	75 - 125	100	75 - 125	1.5, RDL=1.0	mg/kg	0.9	35	106	70 - 130
6613022	Total Uranium (U)	2013/03/04	107	75 - 125	101	75 - 125	<0.050	mg/kg			103	70 - 130
6613022	Total Vanadium (V)	2013/03/04	NC	75 - 125	100	75 - 125	<2.0	mg/kg	0.4	30	108	70 - 130
6613022	Total Zinc (Zn)	2013/03/04	NC	75 - 125	109	75 - 125	<1.0	mg/kg	0.3	30	96	70 - 130

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Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6613022	Total Aluminum (Al)	2013/03/04					<100	mg/kg	0.2	35	111	70 - 130
6613022	Total Calcium (Ca)	2013/03/04					<100	mg/kg	2.6	30	94	70 - 130
6613022	Total Iron (Fe)	2013/03/04					<100	mg/kg	0.2	30	93	70 - 130
6613022	Total Magnesium (Mg)	2013/03/04					<100	mg/kg	0.4	30	97	70 - 130
6613022	Total Phosphorus (P)	2013/03/04					<10	mg/kg	1.8	30	99	70 - 130
6613022	Total Bismuth (Bi)	2013/03/04					<0.10	mg/kg	NC	30		
6613022	Total Potassium (K)	2013/03/04					<100	mg/kg	NC	35		
6613022	Total Sodium (Na)	2013/03/04					<100	mg/kg	NC	35		
6613022	Total Zirconium (Zr)	2013/03/04					<0.50	mg/kg	1.9	30		
6613023	Soluble (2:1) pH	2013/03/04			102	96 - 104			0.4	20		
6613036	Total Antimony (Sb)	2013/03/04	97	75 - 125	98	75 - 125	<0.10	mg/kg	NC	30	100	70 - 130
6613036	Total Arsenic (As)	2013/03/04	105	75 - 125	101	75 - 125	0.61, RDL=0.50	mg/kg	NC	30	97	70 - 130
6613036	Total Barium (Ba)	2013/03/04	NC	75 - 125	108	75 - 125	<0.10	mg/kg	1.4	35	110	70 - 130
6613036	Total Beryllium (Be)	2013/03/04	113	75 - 125	103	75 - 125	<0.40	mg/kg	NC	30		
6613036	Total Cadmium (Cd)	2013/03/04	107	75 - 125	103	75 - 125	<0.050	mg/kg	NC	30	96	70 - 130
6613036	Total Chromium (Cr)	2013/03/04	100	75 - 125	104	75 - 125	<1.0	mg/kg	0.6	30	99	70 - 130
6613036	Total Cobalt (Co)	2013/03/04	101	75 - 125	103	75 - 125	<0.30	mg/kg	1.4	30	91	70 - 130
6613036	Total Copper (Cu)	2013/03/04	NC	75 - 125	104	75 - 125	<0.50	mg/kg	0.1	30	90	70 - 130
6613036	Total Lead (Pb)	2013/03/04	101	75 - 125	103	75 - 125	<0.10	mg/kg	1	35	104	70 - 130
6613036	Total Lithium (Li)	2013/03/04	106	75 - 125	104	75 - 125	<5.0	mg/kg	NC	30		
6613036	Total Manganese (Mn)	2013/03/04	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.3	30	100	70 - 130
6613036	Total Mercury (Hg)	2013/03/04	104	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35	78	70 - 130
6613036	Total Molybdenum (Mo)	2013/03/04	104	75 - 125	103	75 - 125	<0.10	mg/kg	6.4	35	102	70 - 130
6613036	Total Nickel (Ni)	2013/03/04	102	75 - 125	105	75 - 125	<0.80	mg/kg	0.5	30	92	70 - 130
6613036	Total Selenium (Se)	2013/03/04	111	75 - 125	100	75 - 125	<0.50	mg/kg	NC	30		
6613036	Total Silver (Ag)	2013/03/04	100	75 - 125	97	75 - 125	<0.050	mg/kg	NC	35		
6613036	Total Strontium (Sr)	2013/03/04	NC	75 - 125	98	75 - 125	<0.10	mg/kg	1.0	35	104	70 - 130
6613036	Total Thallium (Tl)	2013/03/04	97	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6613036	Total Tin (Sn)	2013/03/04	97	75 - 125	97	75 - 125	<0.10	mg/kg	NC	35		
6613036	Total Titanium (Ti)	2013/03/04	NC	75 - 125	100	75 - 125	<1.0	mg/kg	0.07	35	103	70 - 130
6613036	Total Uranium (U)	2013/03/04	101	75 - 125	99	75 - 125	<0.050	mg/kg	2.6	30	99	70 - 130
6613036	Total Vanadium (V)	2013/03/04	NC	75 - 125	102	75 - 125	<2.0	mg/kg	0.4	30	104	70 - 130
6613036	Total Zinc (Zn)	2013/03/04	NC	75 - 125	107	75 - 125	<1.0	mg/kg	9.9	30	93	70 - 130
6613036	Total Aluminum (Al)	2013/03/04					<100	mg/kg	0.7	35	102	70 - 130
6613036	Total Calcium (Ca)	2013/03/04					<100	mg/kg	4.7	30	99	70 - 130
6613036	Total Iron (Fe)	2013/03/04					<100	mg/kg	1.3	30	96	70 - 130
6613036	Total Magnesium (Mg)	2013/03/04					<100	mg/kg	2.1	30	97	70 - 130
6613036	Total Phosphorus (P)	2013/03/04					<10	mg/kg	1.9	30	99	70 - 130
6613036	Total Bismuth (Bi)	2013/03/04					<0.10	mg/kg	NC	30		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6613036	Total Potassium (K)	2013/03/04					<100	mg/kg	0.3	35		
6613036	Total Sodium (Na)	2013/03/04					<100	mg/kg	NC	35		
6613036	Total Zirconium (Zr)	2013/03/04					<0.50	mg/kg	NC	30		
6613038	Soluble (2:1) pH	2013/03/04			102	96 - 104			1.1	20		
6613753	Total Antimony (Sb)	2013/03/04	NC	75 - 125	94	75 - 125	<0.10	mg/kg	3.5	30	98	70 - 130
6613753	Total Arsenic (As)	2013/03/04	NC	75 - 125	90	75 - 125	<0.50	mg/kg	0.6	30	96	70 - 130
6613753	Total Barium (Ba)	2013/03/04	NC	75 - 125	99	75 - 125	<0.10	mg/kg	2.3	35	104	70 - 130
6613753	Total Beryllium (Be)	2013/03/04	101	75 - 125	91	75 - 125	<0.40	mg/kg	NC	30		
6613753	Total Cadmium (Cd)	2013/03/04	108	75 - 125	93	75 - 125	<0.050	mg/kg	16.3	30	102	70 - 130
6613753	Total Chromium (Cr)	2013/03/04	NC	75 - 125	96	75 - 125	<1.0	mg/kg	0.2	30	95	70 - 130
6613753	Total Cobalt (Co)	2013/03/04	98	75 - 125	99	75 - 125	<0.30	mg/kg	1.1	30	90	70 - 130
6613753	Total Copper (Cu)	2013/03/04	NC	75 - 125	102	75 - 125	<0.50	mg/kg	0.6	30	87	70 - 130
6613753	Total Lead (Pb)	2013/03/04	NC	75 - 125	101	75 - 125	<0.10	mg/kg	3.2	35	101	70 - 130
6613753	Total Lithium (Li)	2013/03/04	103	75 - 125	96	75 - 125	<5.0	mg/kg	NC	30		
6613753	Total Manganese (Mn)	2013/03/04	NC	75 - 125	98	75 - 125	<0.20	mg/kg	0.7	30	98	70 - 130
6613753	Total Mercury (Hg)	2013/03/04	108	75 - 125	90	75 - 125	<0.050	mg/kg	NC	35	79	70 - 130
6613753	Total Molybdenum (Mo)	2013/03/04	105	75 - 125	99	75 - 125	<0.10	mg/kg	1.1	35	93	70 - 130
6613753	Total Nickel (Ni)	2013/03/04	NC	75 - 125	100	75 - 125	<0.80	mg/kg	2.9	30	88	70 - 130
6613753	Total Selenium (Se)	2013/03/04	117	75 - 125	87	75 - 125	<0.50	mg/kg	NC	30		
6613753	Total Silver (Ag)	2013/03/04	100	75 - 125	93	75 - 125	<0.050	mg/kg	NC	35		
6613753	Total Strontium (Sr)	2013/03/04	NC	75 - 125	98	75 - 125	<0.10	mg/kg	0.6	35	104	70 - 130
6613753	Total Thallium (Tl)	2013/03/04	97	75 - 125	94	75 - 125	<0.050	mg/kg	NC	30	88	70 - 130
6613753	Total Tin (Sn)	2013/03/04	104	75 - 125	97	75 - 125	<0.10	mg/kg	4.0	35		
6613753	Total Titanium (Ti)	2013/03/04	NC	75 - 125	97	75 - 125	<1.0	mg/kg	0.8	35	103	70 - 130
6613753	Total Uranium (U)	2013/03/04	104	75 - 125	99	75 - 125	<0.050	mg/kg	4.0	30	90	70 - 130
6613753	Total Vanadium (V)	2013/03/04	NC	75 - 125	96	75 - 125	<2.0	mg/kg	0.8	30	102	70 - 130
6613753	Total Zinc (Zn)	2013/03/04	NC	75 - 125	90	75 - 125	<1.0	mg/kg	1.1	30	93	70 - 130
6613753	Total Aluminum (Al)	2013/03/04					<100	mg/kg	0.6	35	103	70 - 130
6613753	Total Calcium (Ca)	2013/03/04					<100	mg/kg	0.3	30	91	70 - 130
6613753	Total Iron (Fe)	2013/03/04					<100	mg/kg	0.04	30	90	70 - 130
6613753	Total Magnesium (Mg)	2013/03/04					<100	mg/kg	0.6	30	93	70 - 130
6613753	Total Phosphorus (P)	2013/03/04					<10	mg/kg	0.01	30	96	70 - 130
6613753	Total Bismuth (Bi)	2013/03/04					<0.10	mg/kg	NC	30		
6613753	Total Potassium (K)	2013/03/04					<100	mg/kg	1.7	35		
6613753	Total Sodium (Na)	2013/03/04					<100	mg/kg	NC	35		
6613753	Total Zirconium (Zr)	2013/03/04					<0.50	mg/kg	0.04	30		
6613758	Soluble (2:1) pH	2013/03/04			102	96 - 104			1	20		
6613794	O-TERPHENYL (sur.)	2013/03/04	94	50 - 130	106	50 - 130	108	%				
6613794	EPH (C10-C19)	2013/03/04	116	50 - 130	115	50 - 130	<100	mg/kg	NC	40		

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Report Date: 2013/03/12

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6613794	EPH (C19-C32)	2013/03/04	99	50 - 130	98	50 - 130	<100	mg/kg	NC	40		
6613808	O-TERPHENYL (sur.)	2013/03/04	95	50 - 130	105	50 - 130	107	%				
6613808	F2 (C10-C16 Hydrocarbons)	2013/03/04	103	50 - 130	100	80 - 120	<10	mg/kg	NC	40		
6613808	F3 (C16-C34 Hydrocarbons)	2013/03/04	84	50 - 130	82	80 - 120	<10	mg/kg	NC	40		
6613808	F4 (C34-C50 Hydrocarbons)	2013/03/04	83	50 - 130	84	80 - 120	<10	mg/kg	NC	40		
6613808	Reached Baseline at C50	2013/03/04							NC	50		
6614559	Wet Soluble Calcium (Ca)	2013/03/04					<5.0	mg/L	1.4	30		
6614559	Wet Soluble Magnesium (Mg)	2013/03/04					<5.0	mg/L	NC	30		
6614559	Wet Soluble Potassium (K)	2013/03/04					<20	mg/L	NC	30		
6614559	Wet Soluble Sodium (Na)	2013/03/04					<5.0	mg/L	NC	30		
6614559	Wet Soluble Sulphur (S)	2013/03/04					<30	mg/L	NC	30		
6614576	Saturation %	2013/03/04			102	80 - 120	<1.0	%	0.06	30		
6614661	Soluble pH	2013/03/04			100	97 - 103			0.9	20		
6614670	Soluble Conductivity	2013/03/06			102	70 - 130	1.4, RDL=1.0	uS/cm	12.9	35		
6614922	Soluble Chloride (Cl)	2013/03/04					<5.0	mg/L	NC	30		
6614925	Soluble Sulphate (SO4)	2013/03/04					<10	mg/L	NC	30		
6616482	D10-ANTHRACENE (sur.)	2013/03/04	81	60 - 130	87	60 - 130	93	%				
6616482	D8-ACENAPHTHYLENE (sur.)	2013/03/04	79	50 - 130	83	50 - 130	88	%				
6616482	D8-NAPHTHALENE (sur.)	2013/03/04	78	50 - 130	84	50 - 130	89	%				
6616482	TERPHENYL-D14 (sur.)	2013/03/04	86	60 - 130	92	60 - 130	98	%				
6616482	Naphthalene	2013/03/04	86	50 - 130	91	50 - 130	<0.010	mg/kg	NC	50		
6616482	2-Methylnaphthalene	2013/03/04	88	50 - 130	92	50 - 130	<0.020	mg/kg	NC	50		
6616482	Acenaphthylene	2013/03/04	88	50 - 130	92	50 - 130	<0.0050	mg/kg	NC	50		
6616482	Acenaphthene	2013/03/04	93	50 - 130	98	50 - 130	<0.0050	mg/kg	NC	50		
6616482	Fluorene	2013/03/04	93	50 - 130	96	50 - 130	<0.020	mg/kg	NC	50		
6616482	Phenanthrene	2013/03/04	89	60 - 130	96	60 - 130	<0.020	mg/kg	NC	50		
6616482	Anthracene	2013/03/04	96	60 - 130	100	60 - 130	<0.0040	mg/kg	NC	50		
6616482	Fluoranthene	2013/03/04	96	60 - 130	100	60 - 130	<0.020	mg/kg	NC	50		
6616482	Pyrene	2013/03/04	100	60 - 130	104	60 - 130	<0.020	mg/kg	NC	50		
6616482	Benzo(a)anthracene	2013/03/04	94	60 - 130	99	60 - 130	<0.020	mg/kg	NC	50		
6616482	Chrysene	2013/03/04	93	60 - 130	102	60 - 130	<0.020	mg/kg	NC	50		
6616482	Benzo(b&j)fluoranthene	2013/03/04	96	60 - 130	98	60 - 130	<0.020	mg/kg	NC	50		
6616482	Benzo(k)fluoranthene	2013/03/04	96	60 - 130	102	60 - 130	<0.020	mg/kg	NC	50		
6616482	Benzo(a)pyrene	2013/03/04	104	60 - 130	108	60 - 130	<0.020	mg/kg	NC	50		
6616482	Indeno(1,2,3-cd)pyrene	2013/03/04	106	60 - 130	104	60 - 130	<0.050	mg/kg	NC	50		
6616482	Dibenz(a,h)anthracene	2013/03/04	106	60 - 130	104	60 - 130	<0.050	mg/kg	NC	50		
6616482	Benzo(g,h,i)perylene	2013/03/04	100	60 - 130	100	60 - 130	<0.050	mg/kg	NC	50		
6618148	Wet Soluble Calcium (Ca)	2013/03/05					<5.0	mg/L	17.1	30		
6618148	Wet Soluble Magnesium (Mg)	2013/03/05					<5.0	mg/L	NC	30		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6618148	Wet Soluble Potassium (K)	2013/03/05					<20	mg/L	NC	30		
6618148	Wet Soluble Sodium (Na)	2013/03/05					<5.0	mg/L	NC	30		
6618148	Wet Soluble Sulphur (S)	2013/03/05					<30	mg/L	NC	30		
6619605	Saturation %	2013/03/05			102	80 - 120	<1.0	%	0.4	30		
6619618	Soluble pH	2013/03/05			101	97 - 103			0.3	20		
6619620	Soluble Conductivity	2013/03/06			105	70 - 130	<1.0	uS/cm	0	35		
6620923	Soluble Chloride (Cl)	2013/03/05					<5.0	mg/L				
6620924	Soluble Sulphate (SO4)	2013/03/05					<10	mg/L	NC	30		
6623530	Wet Soluble Calcium (Ca)	2013/03/06					<5.0	mg/L	2.6	30		
6623530	Wet Soluble Magnesium (Mg)	2013/03/06					<5.0	mg/L	NC	30		
6623530	Wet Soluble Potassium (K)	2013/03/06					<20	mg/L	NC	30		
6623530	Wet Soluble Sodium (Na)	2013/03/06					<5.0	mg/L	1.9	30		
6623530	Wet Soluble Sulphur (S)	2013/03/06					<30	mg/L	NC	30		
6624991	Initial pH of Sample	2013/03/07					4.95, RDL=N/A	pH Units	5.1	20		
6624991	Final pH of Leachate	2013/03/07					4.95, RDL=N/A	pH Units	1.6	20		
6624991	pH of Leaching Fluid	2013/03/07					4.95, RDL=N/A	pH Units	0	20		
6625944	Soluble Chloride (Cl)	2013/03/06					<5.0	mg/L	NC	30		
6625951	Soluble Sulphate (SO4)	2013/03/06					<10	mg/L	NC	30		
6628690	LEACHATE Lead (Pb)	2013/03/07	106	75 - 125	92	75 - 125	<0.10	mg/L	NC	35		
6637363	O-TERPHENYL (sur.)	2013/03/11	110	50 - 130	114	50 - 130	98	%				
6637363	F2 (C10-C16 Hydrocarbons)	2013/03/11	102	50 - 130	103	80 - 120	<10	mg/kg	NC	40		
6637363	F3 (C16-C34 Hydrocarbons)	2013/03/11	107	50 - 130	108	80 - 120	<10	mg/kg	NC	40		
6637363	F4 (C34-C50 Hydrocarbons)	2013/03/11	104	50 - 130	108	80 - 120	<10	mg/kg	NC	40		
6637363	Reached Baseline at C50	2013/03/11							NC	50		
6637445	O-TERPHENYL (sur.)	2013/03/11	93	50 - 130	110	50 - 130	111	%				
6637445	F2 (C10-C16 Hydrocarbons)	2013/03/11	85	50 - 130	102	80 - 120	<10	mg/kg	NC(2)	40		
6637445	F3 (C16-C34 Hydrocarbons)	2013/03/11	89	50 - 130	107	80 - 120	<10	mg/kg	19.1(2)	40		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6637445	F4 (C34-C50 Hydrocarbons)	2013/03/11	90	50 - 130	106	80 - 120	<10	mg/kg	NC(2)	40		
6637445	Reached Baseline at C50	2013/03/11							NC	50		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - Detection limits raised due to high moisture content.

Maxxam

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4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665-8566 Fax (604) 730 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B316165	353268
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#353268-25-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [ ] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): [ ]
1 Day [x] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT1108	Exc13-F1-130228	13/02/28		Soil		X	X			X			X			2	
2	FT1109	Exc13-F2-130228					X	X			X			X			2	
3	FT1110	Exc13-F3-130228					X	X			X			X			2	
4	FT1111	Exc13-F4-130228					X	X			X			X			2	
5	FT1112	Exc13-F5-130228					X	X			X			X			2	
6	FT1113	Exc13-W1-130228					X	X			X			X			2	
7	FT1114	Exc13-W2-130228					X	X			X			X			2	B316165
8	FT1115	Exc13-W3-130228					X	X			X			X			2	
9	FT1116	Exc13-W4-130228					X	X			X			X			2	
10	FT1117	Exc13-W5-130228					X	X			X			X			2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[illegible] / MARKEDWARDS	13/02/28	16:07	[illegible]	2013/02/03/01	08:10		[ ]	11	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
#606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665-8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION		REPORT INFORMATION (if differs from invoice)		PROJECT INFORMATION	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:	
Phone:	(604)775-6810 Fax: (604)775-6850	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	

Laboratory Use Only:

MAXXAM JOB #:	BOTTLE ORDER #:
	353268
CHAIN OF CUSTODY #:	PROJECT MANAGER:
C#055208-24-01	Kim Domino

REGULATORY CRITERIA:
- [ ] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [x] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ *(call lab for #)*

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals-Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT1155	Exc13-W6-130228	13/02/28		Soil		X	X			X			X			2	
2	FT1156	Exc13-W7-130228	↓		↓		X	X			X			X			2	
3	FT1157	SP13-16-130227	13/02/27				X	X						X			2	
4	FT1158	SP13-17-130227	↓				X	X						X			2	
5	FT1159	SP13-18-130227	↓				X	X						X			2	
6	FT1160	SP13-19-130228	13/02/28				X	X						X			2	
7	FT1161	SP13-20-130228	↓				X	X						X			2	B316165
8	FT1162	SP13-21-130228	↓				X	X						X			2	
9	FT1163	SP13-22-130228	↓				X	X						X			2	
10	FT1164	SP13-20-01-130228	↓		↓		X	X						X			2	

RELINQUISHED BY: (Signature/Print)	Date: (YYMMDD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YYMMDD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/02/28	16:08	[illegible]	2013/03/01	08:10		[ ]	11.1	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free (800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#353268-23-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
1 Day ☒ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT 1201	SP13-23-130228	13/02/28		Soil		X	X						X			2	
2	FT 1209	SP13-24-130228					X	X						X			2	
3	FT 1209	SP13-25-130228					X	X	X	X	X			X			2	
4	FT 1210	SP13-26-130228					X	X						X			2	
5	FT 1211	SP13-27-130228					X	X						X			2	
6	FT 1212	SP13-28-130228					X	X						X			2	
7	FT 1213	SP13-29-130228					X	X	X	X	X			X			2	
8	FT 1214	SP13-30-130228					X	X						X			2	B316165
9	FT 1215	SP13-30A-130228					X	X						X			2	
10	FT 1216	SP13-31-130228					X	X	X	X	X			X			2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MG / MARK EDWARDS	13/02/28	16:08	Maxxam / Laurel Berthauer	2013/03/01	08:10		☐	1.1	☒ Yes ☐ No

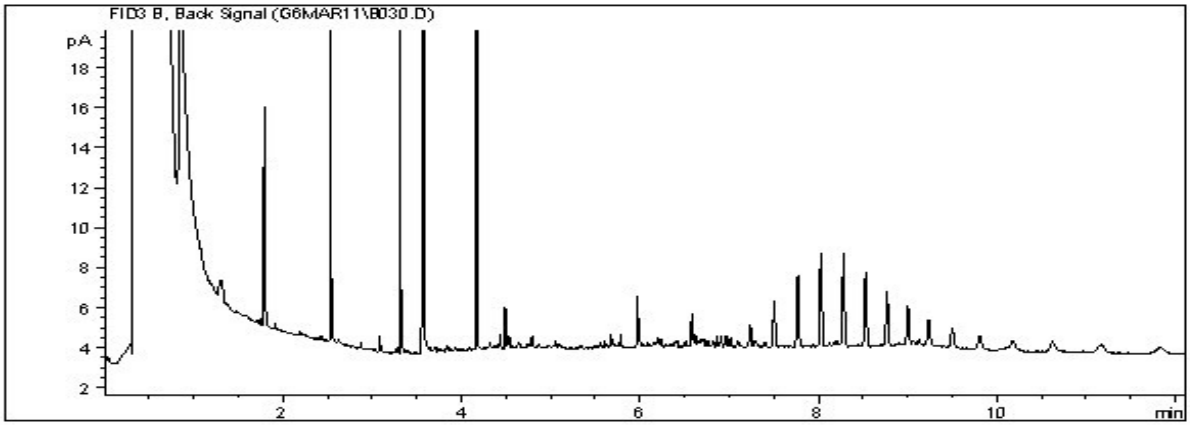
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

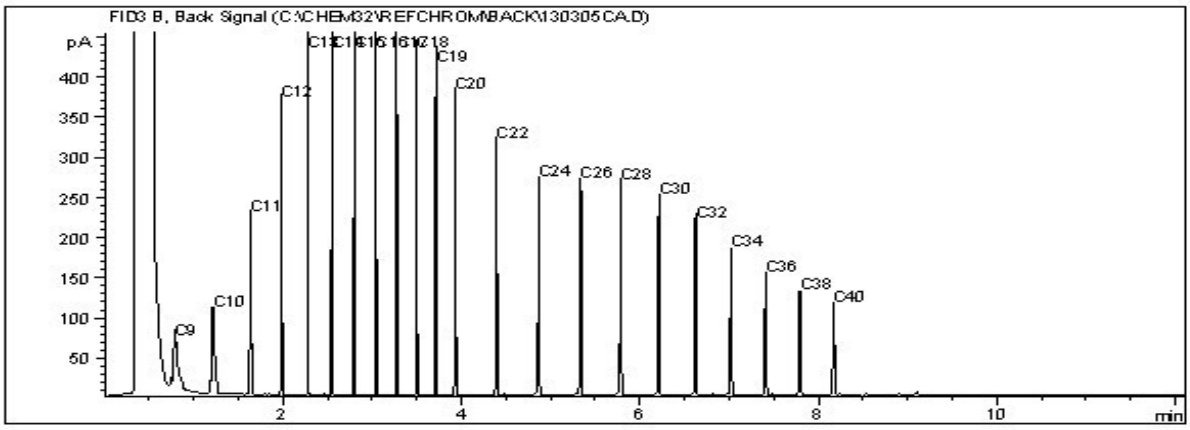
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1108

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-F1-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

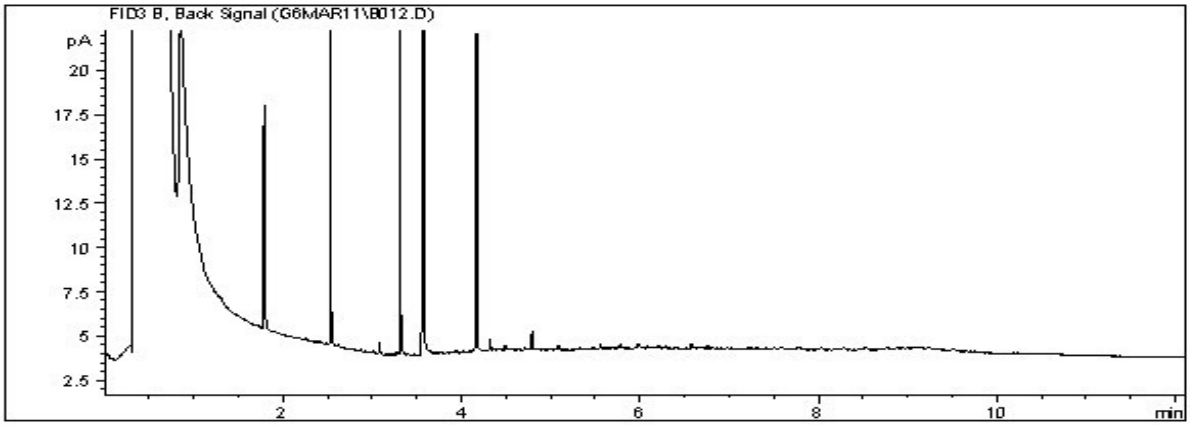
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

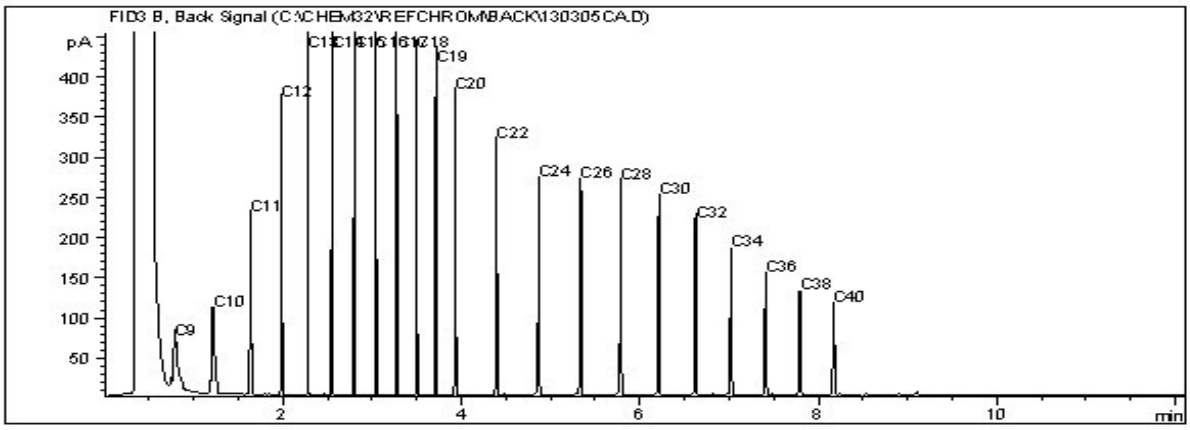
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1109

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-F2-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

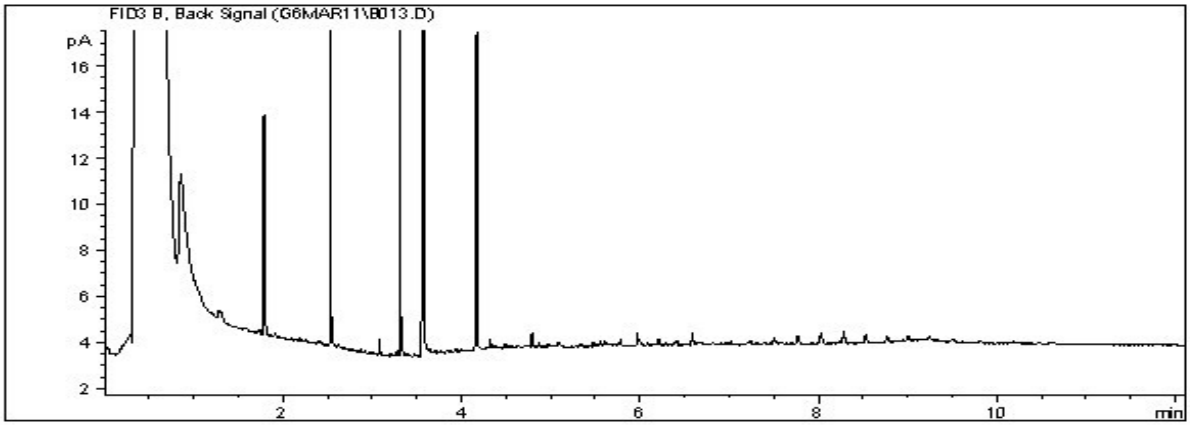
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

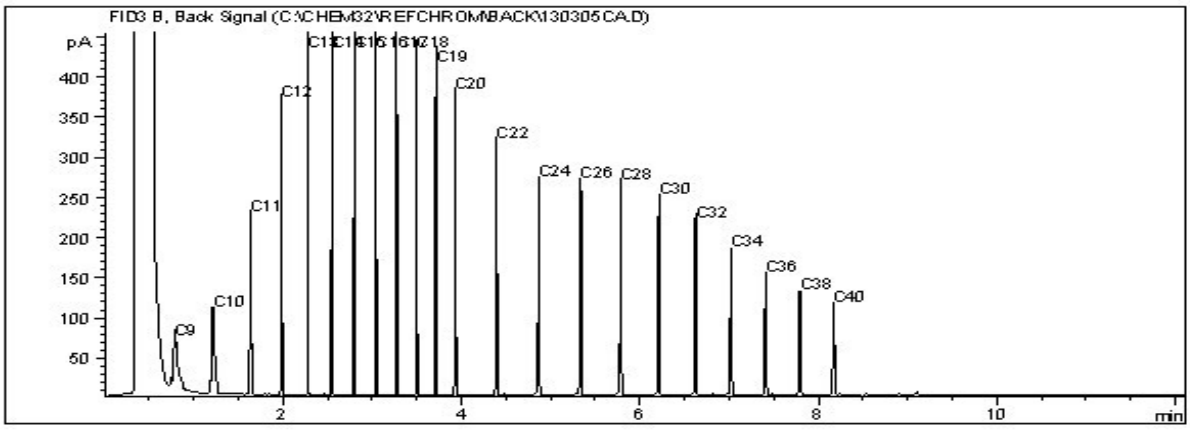
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1110

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-F3-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

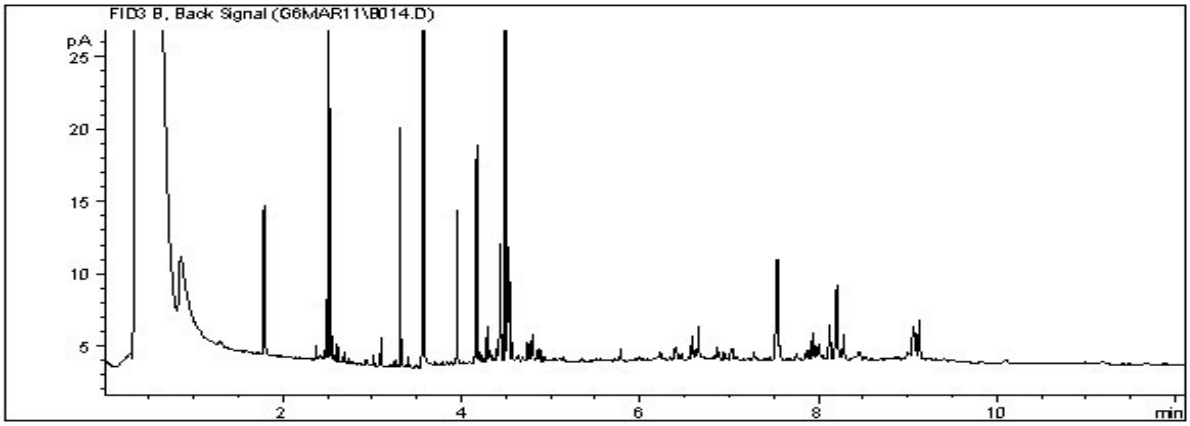
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

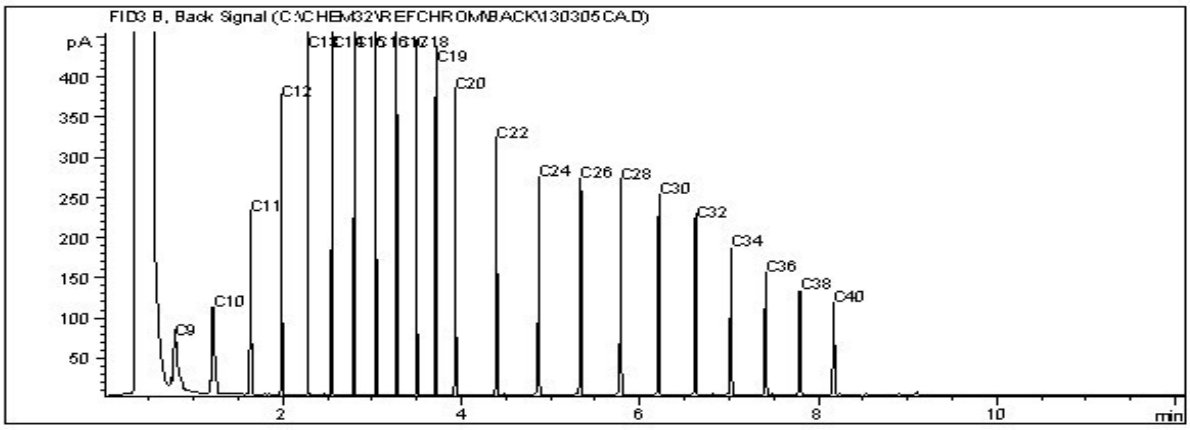
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1111

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-F4-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

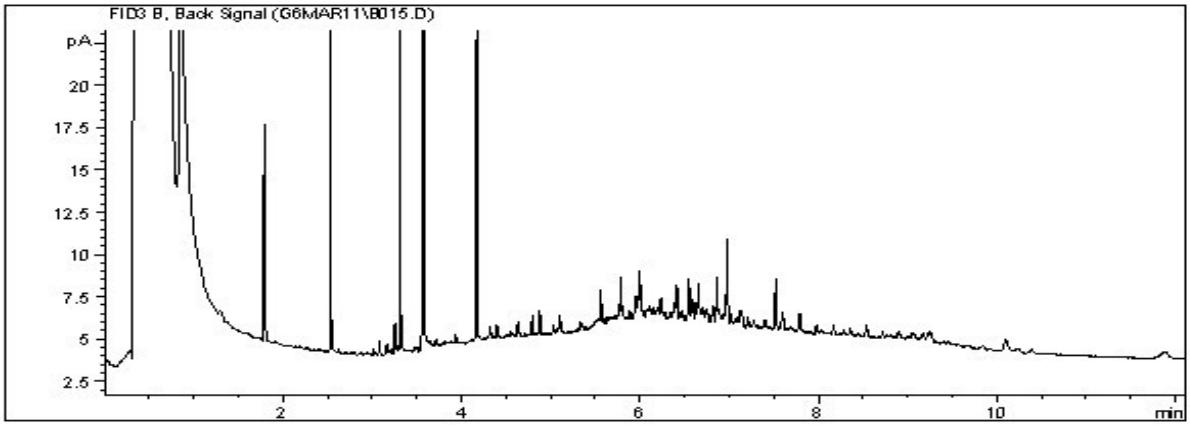
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

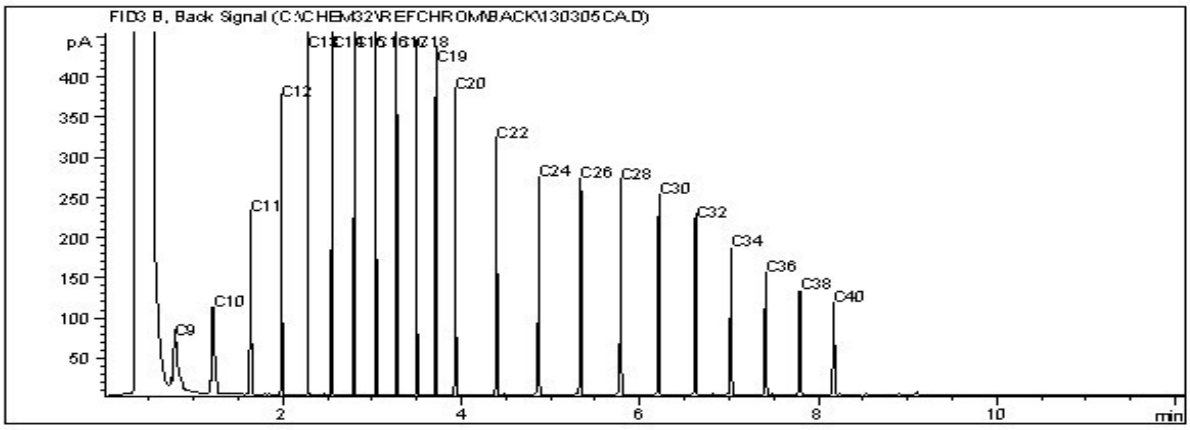
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1112

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-F5-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

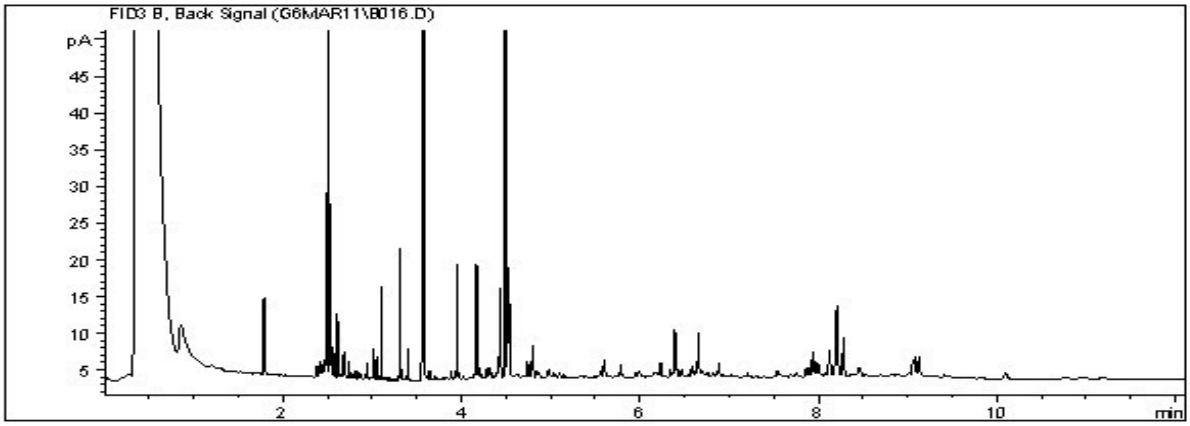
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

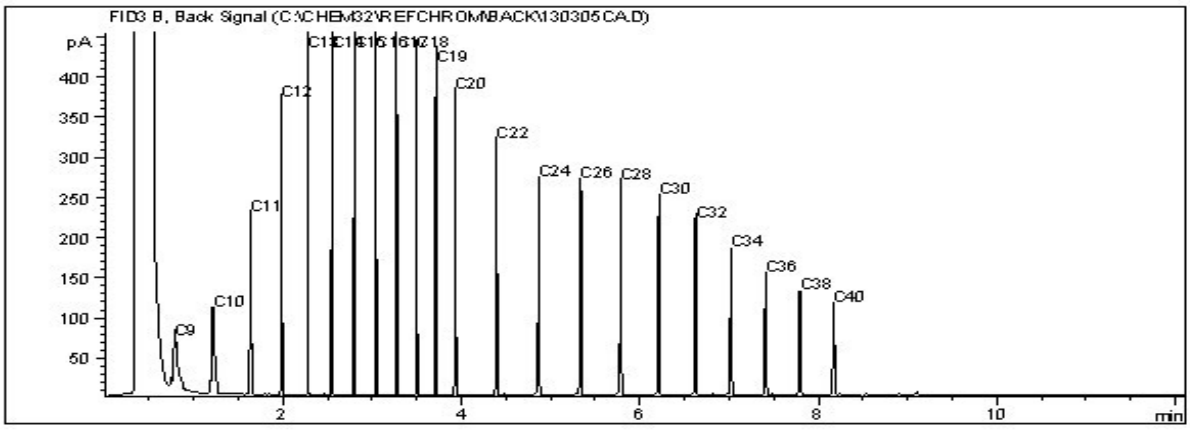
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1113

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W1-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

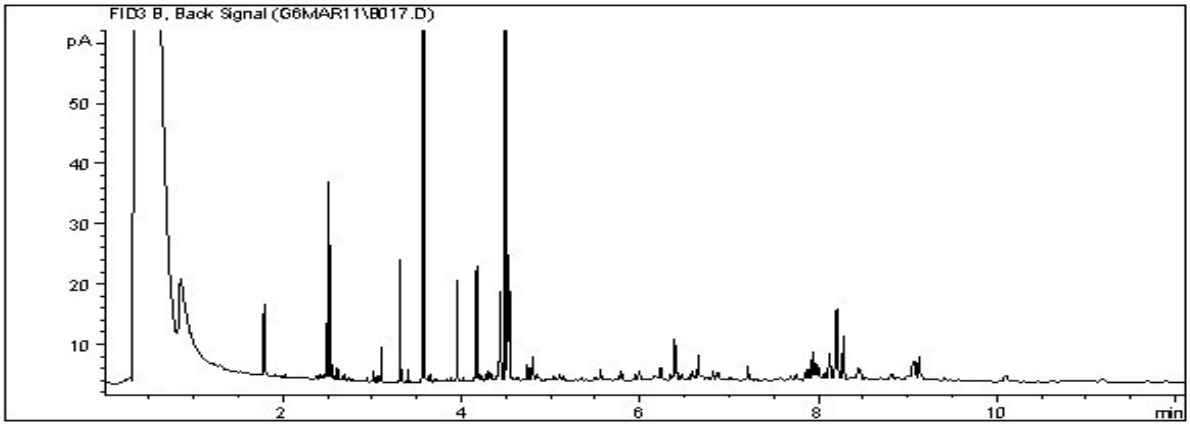
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

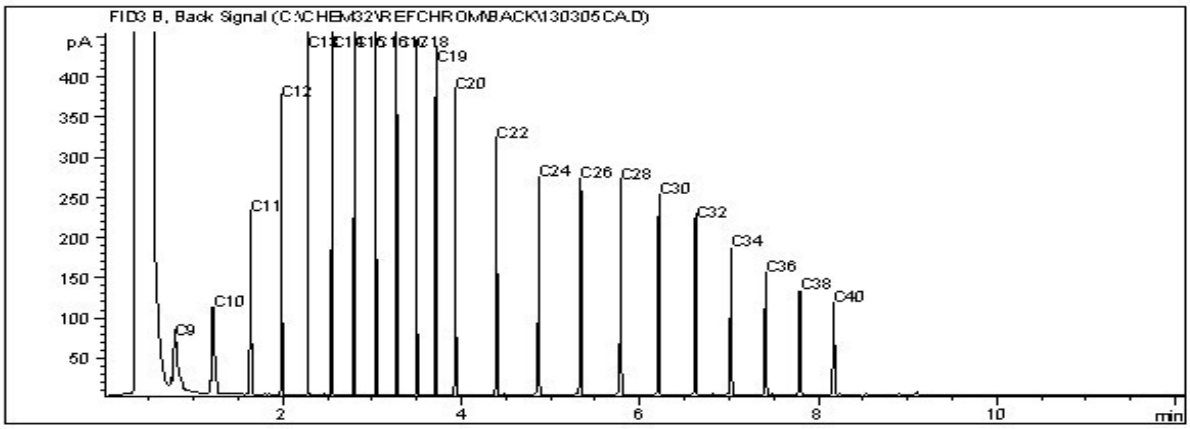
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1114

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W2-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

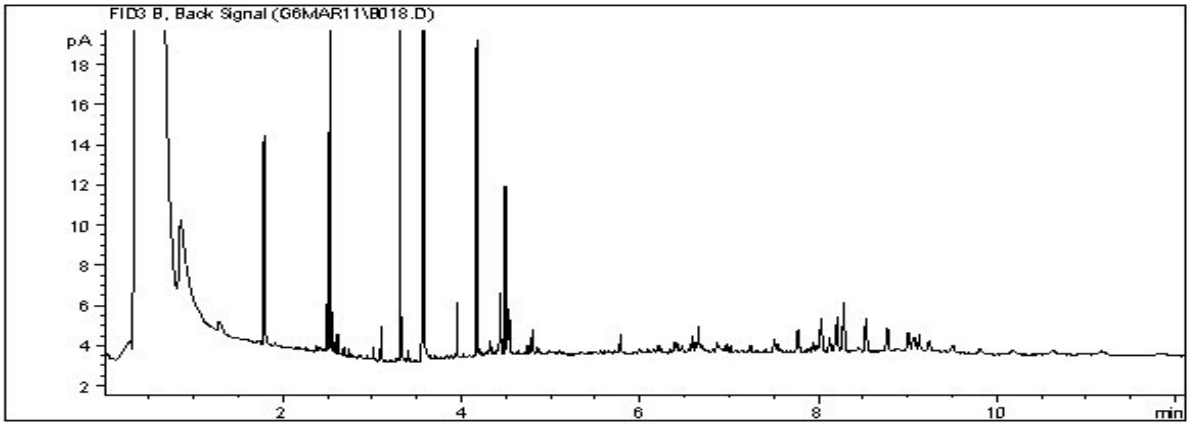
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

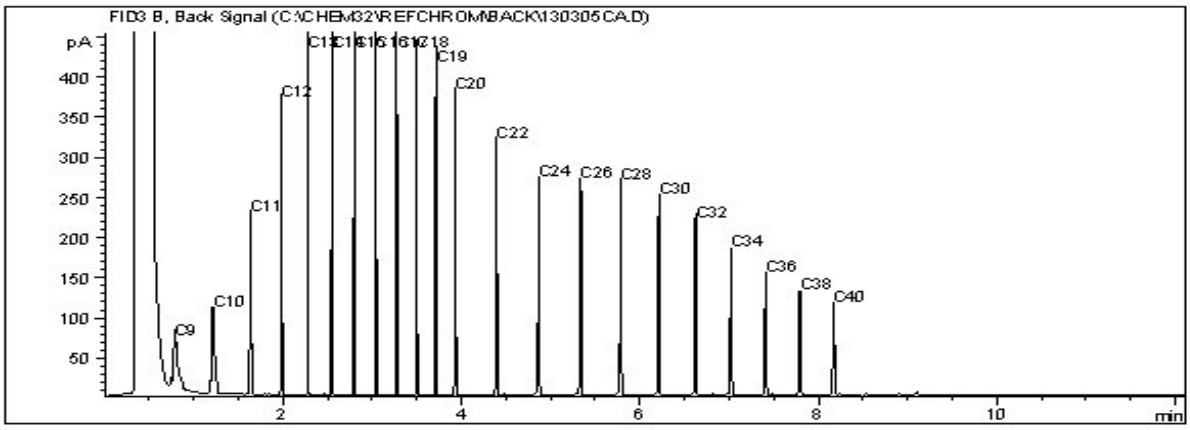
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1115

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W3-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

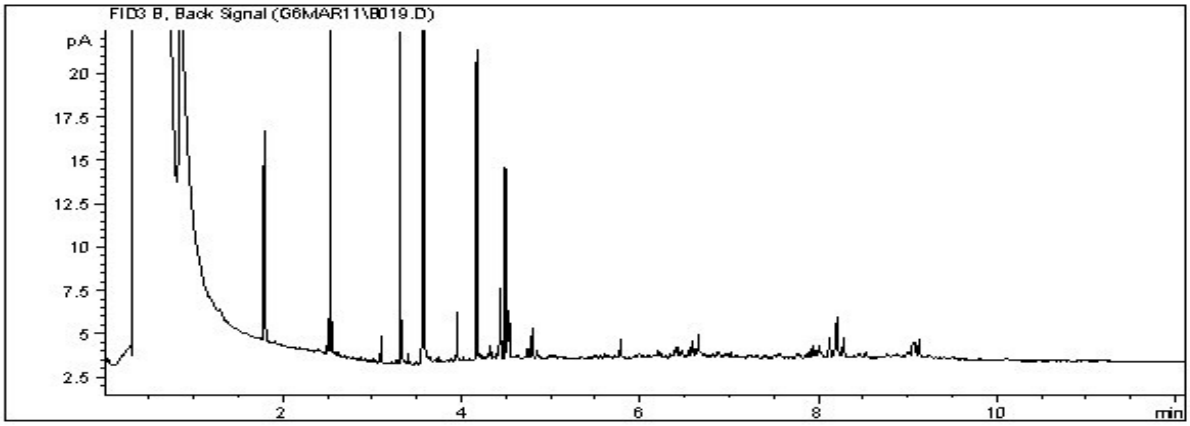
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

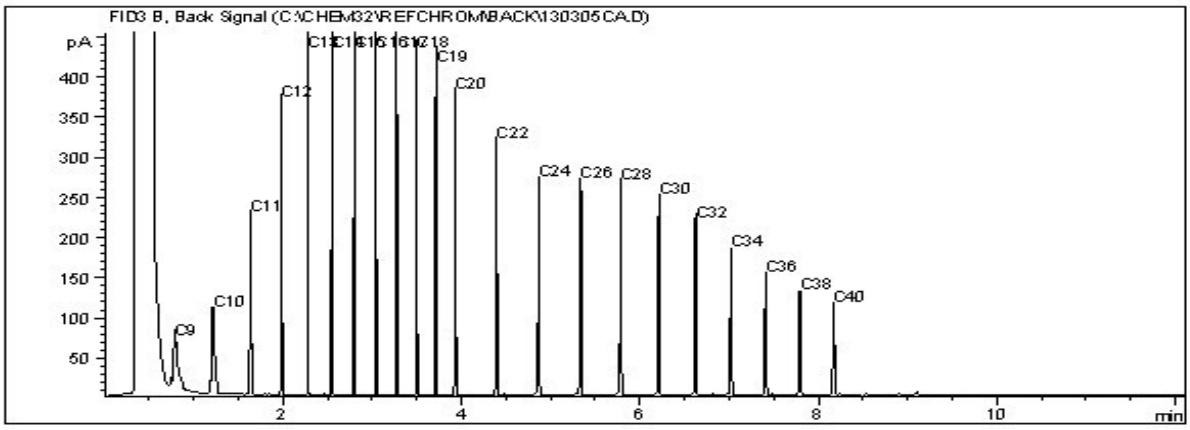
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1116

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W4-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

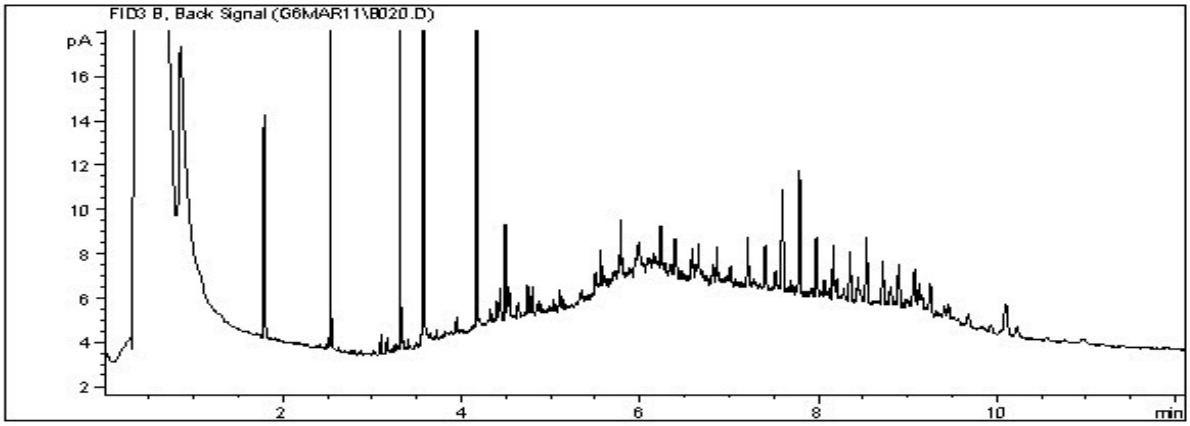
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

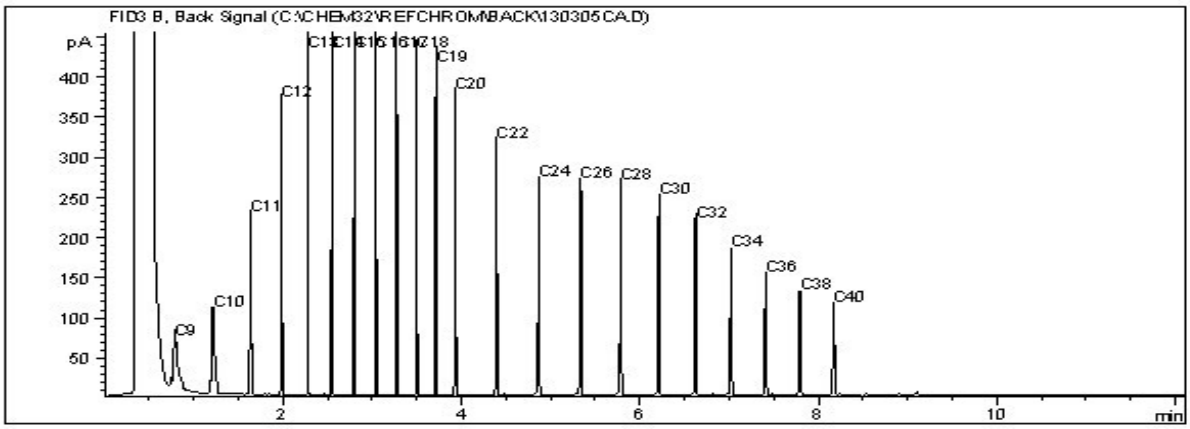
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1117

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W5-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

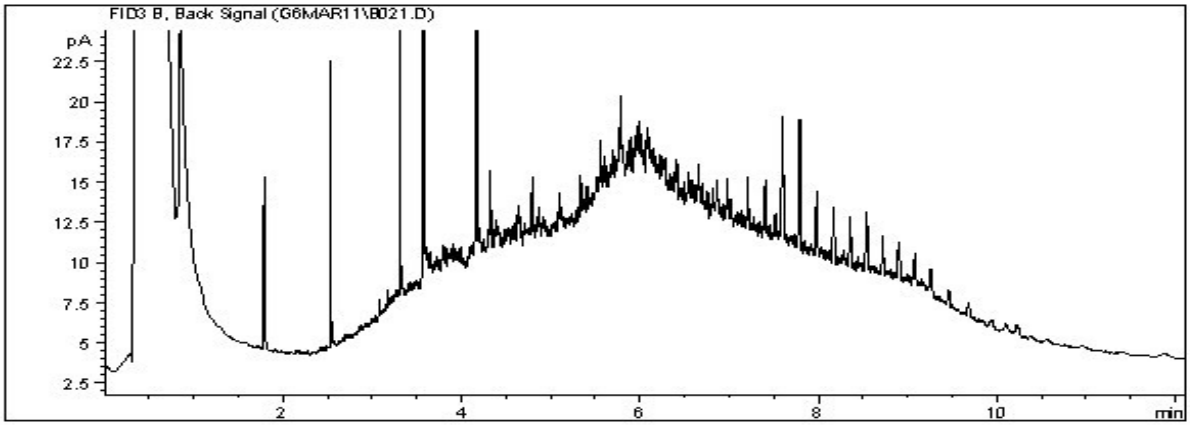
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

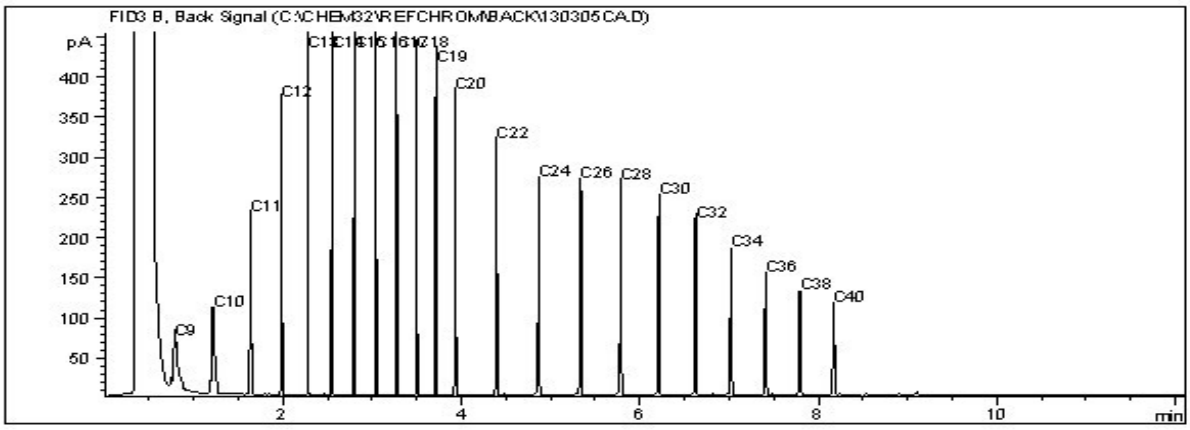
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1155

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W6-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

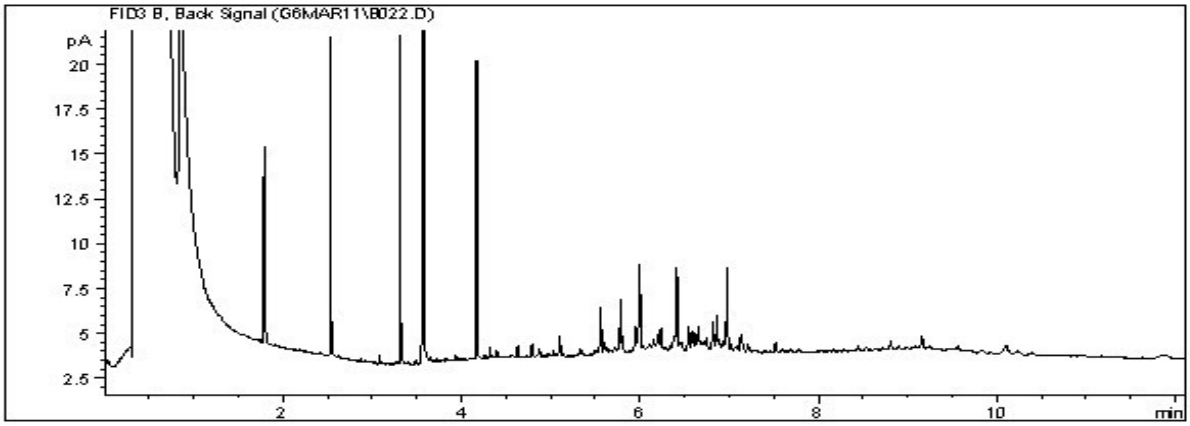
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

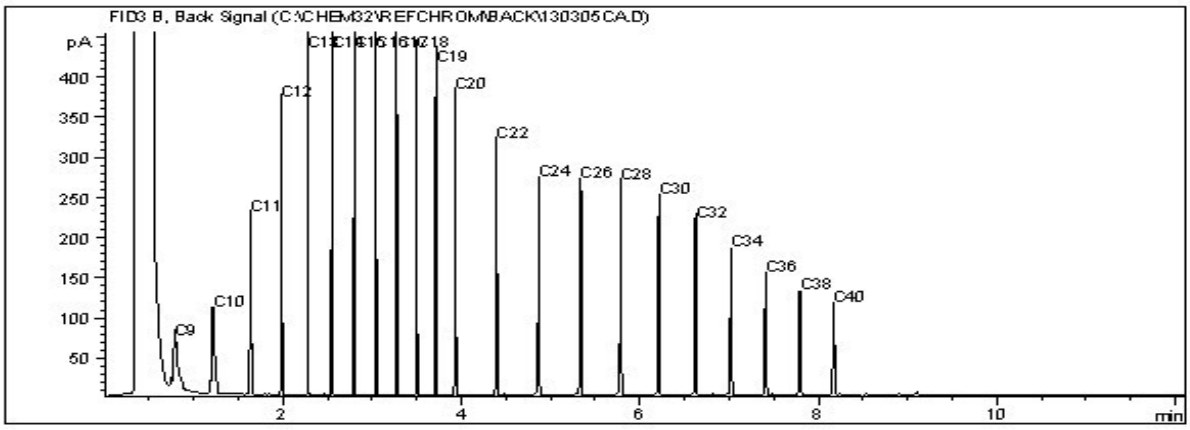
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1156

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: EXC13-W7-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

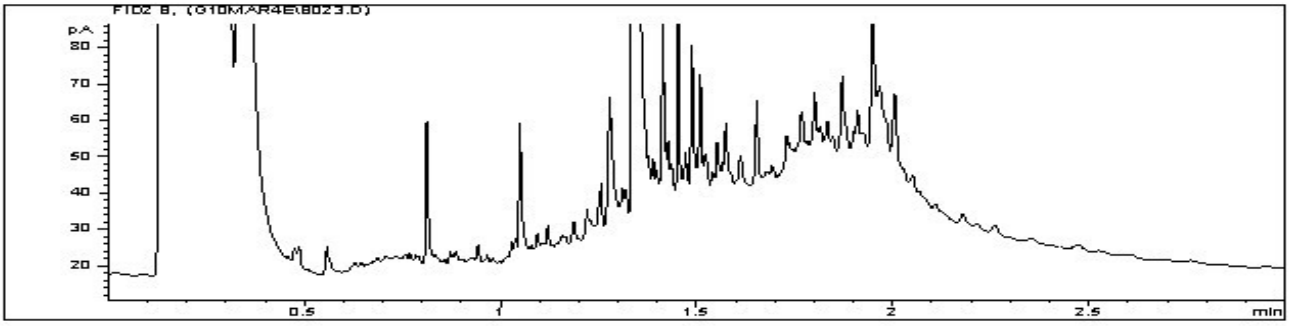
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

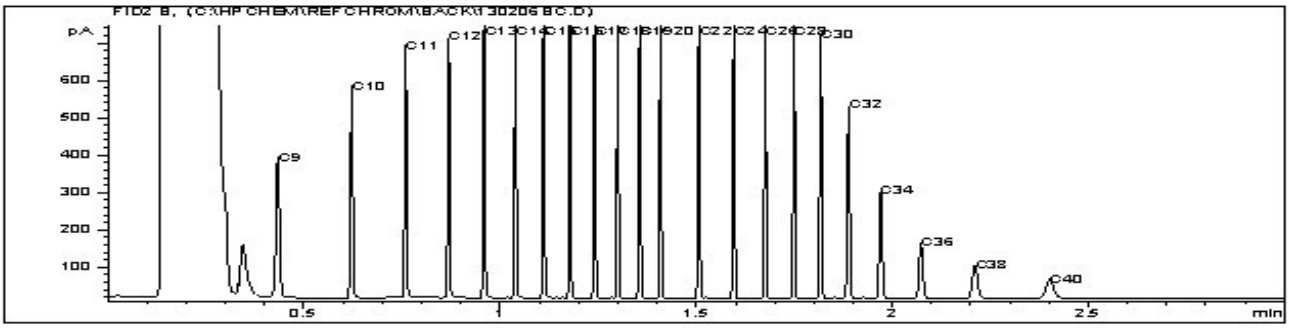
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1209

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-25-130228

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

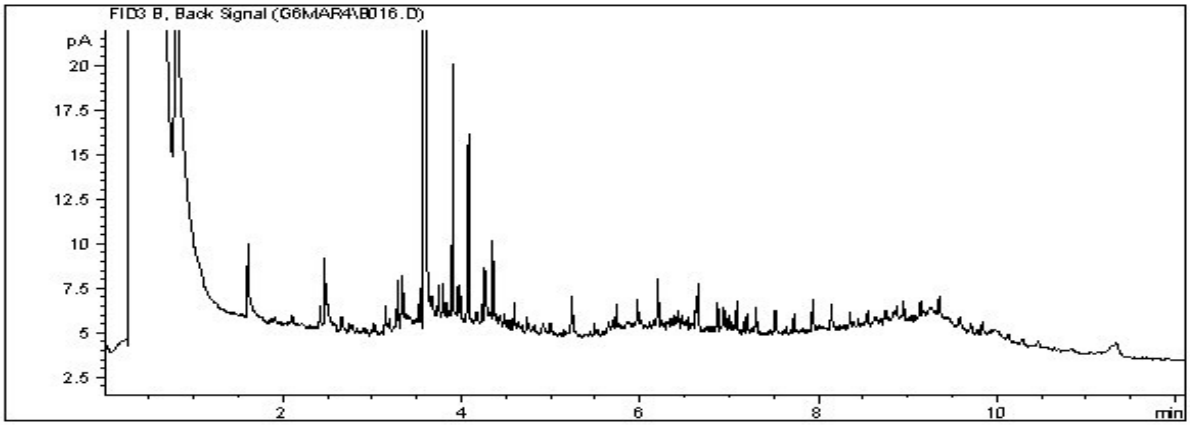
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

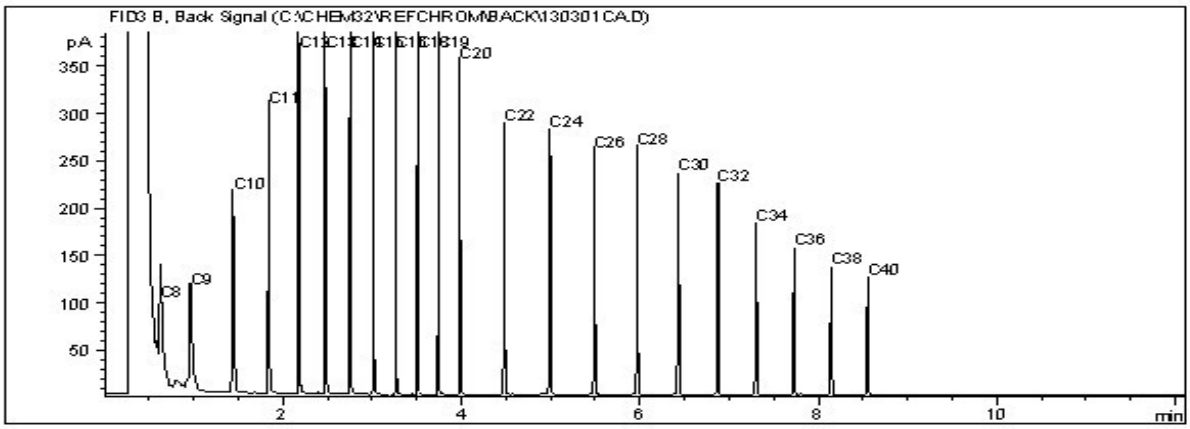
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1209

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-25-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

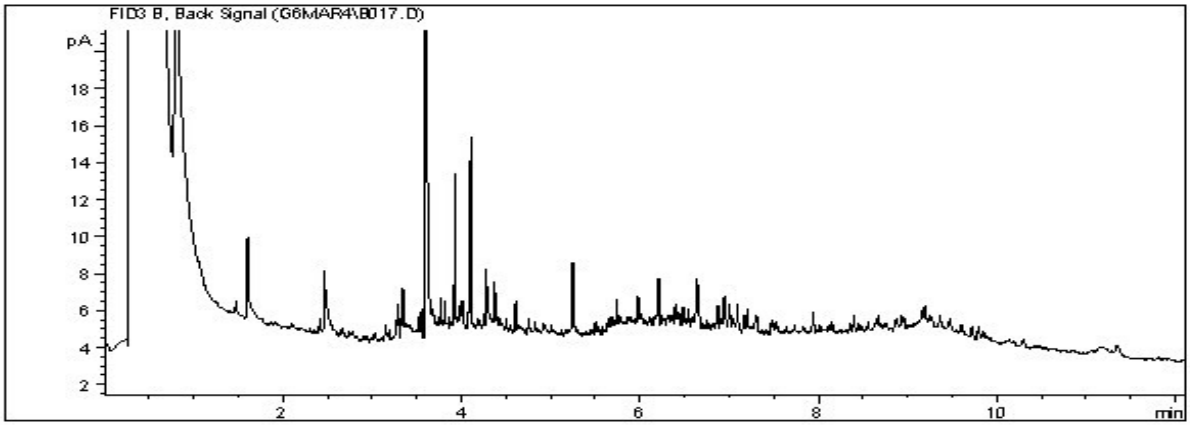
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

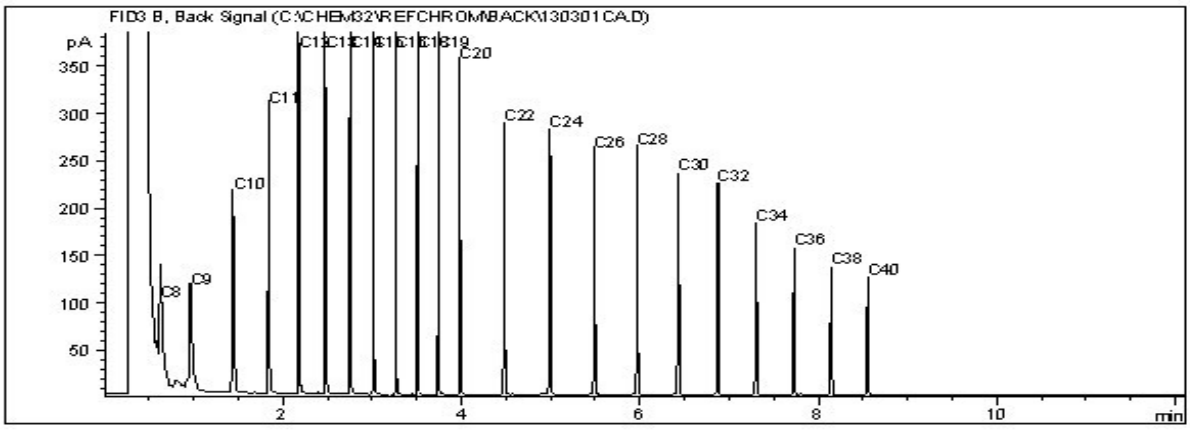
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1209 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-25-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

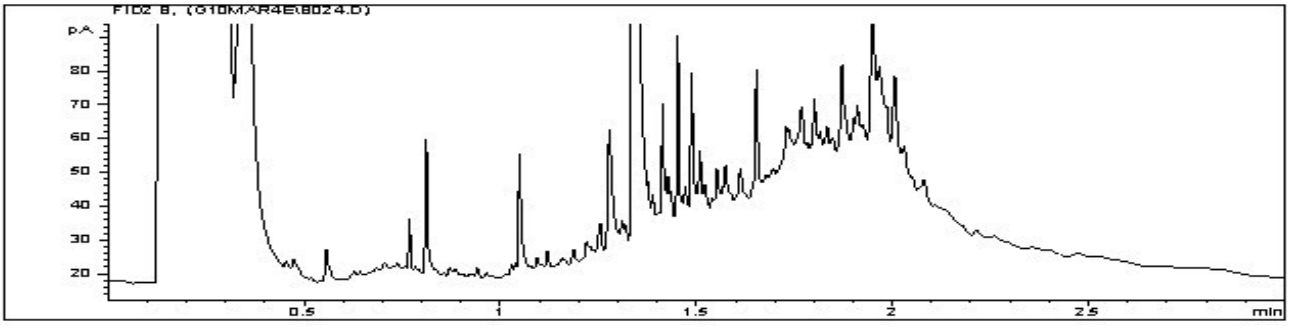
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

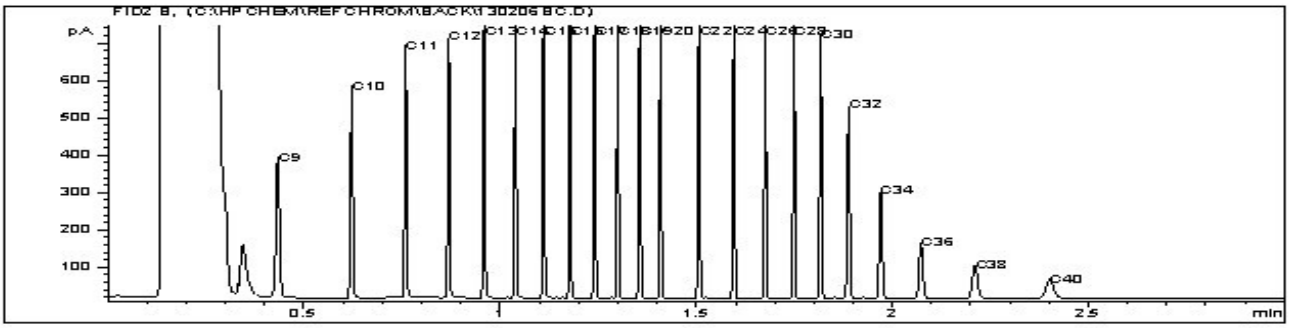
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1209 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-25-130228

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

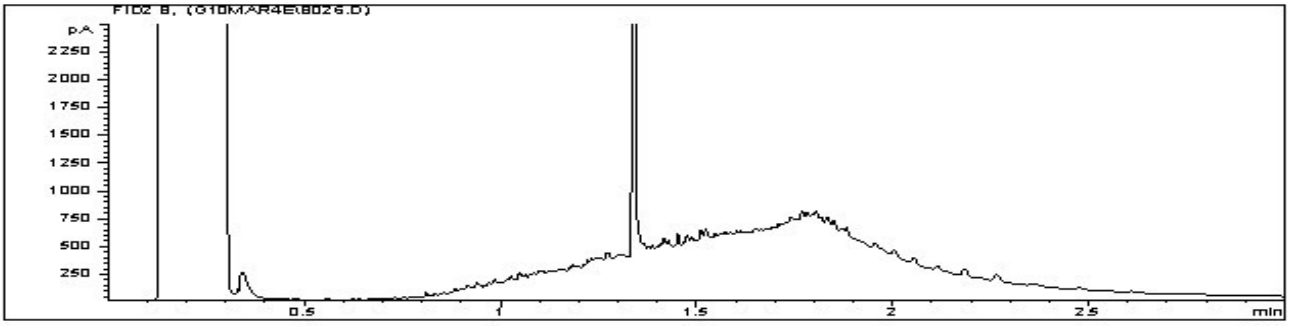
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

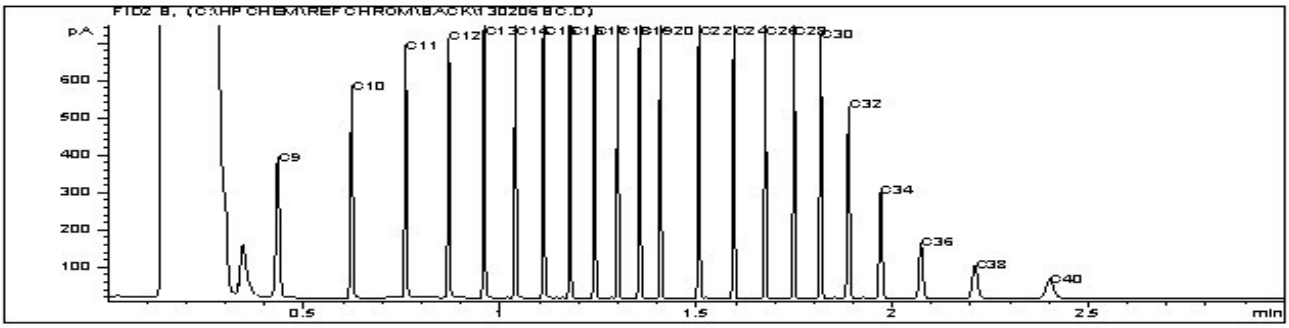
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1213

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-29-130228

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

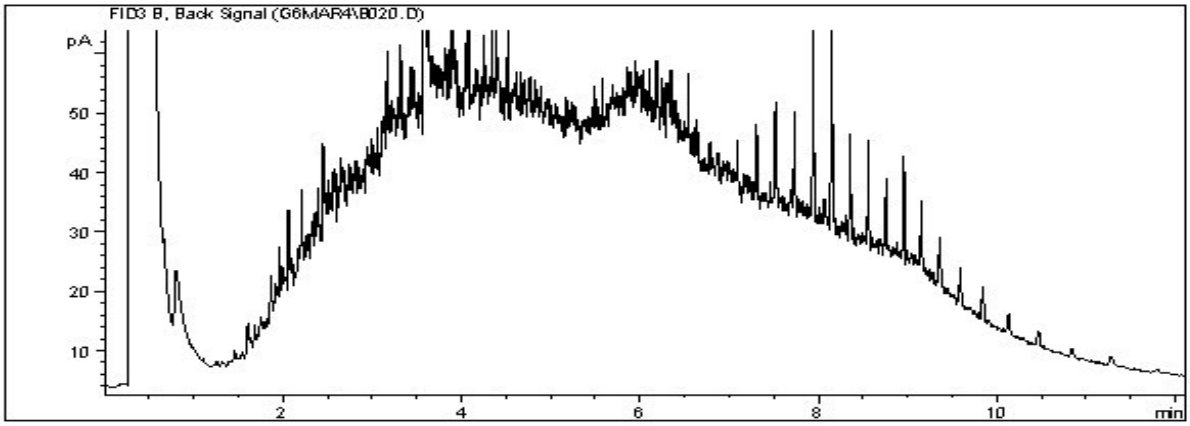
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

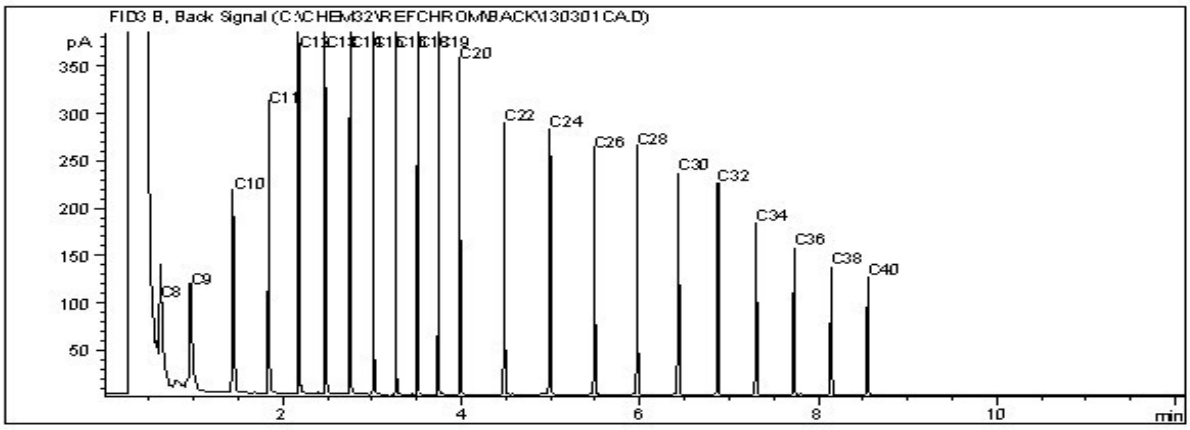
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1213

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-29-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

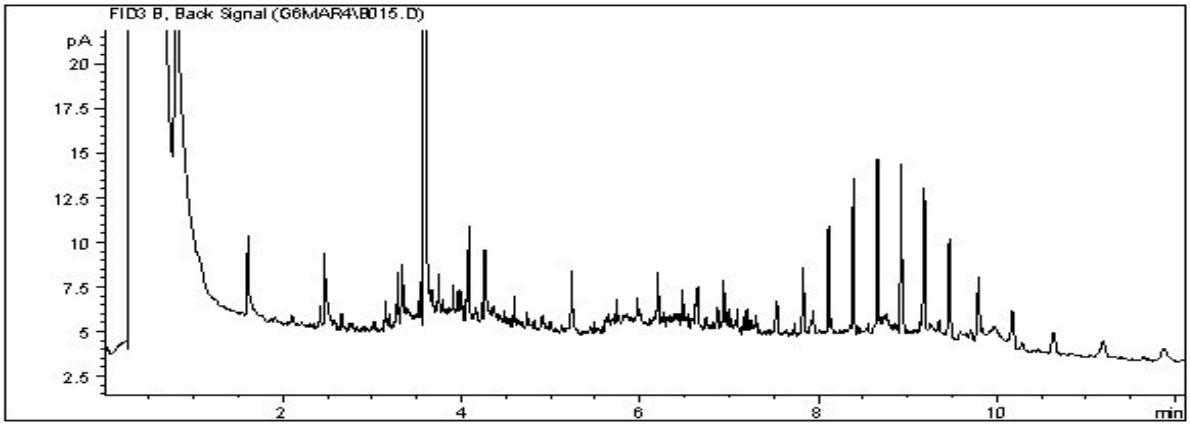
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

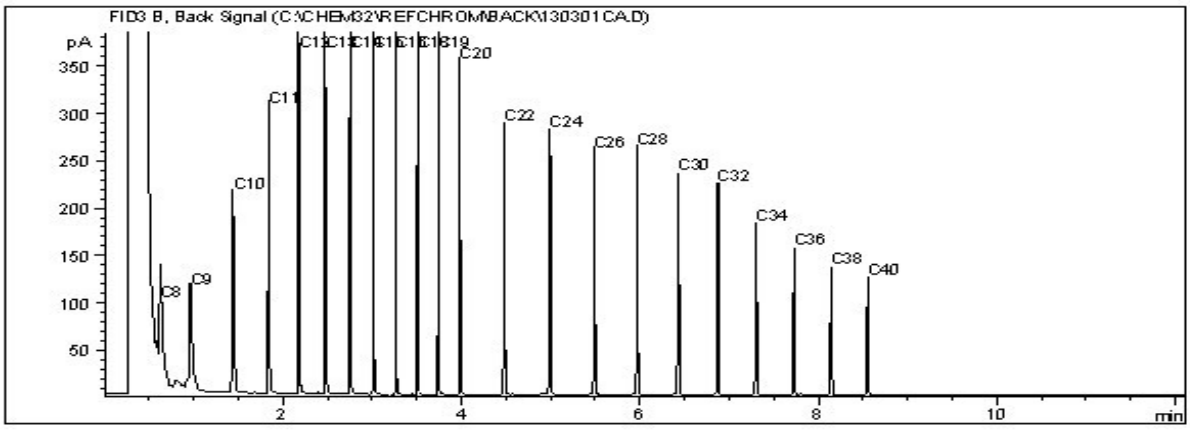
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1216

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-31-130228

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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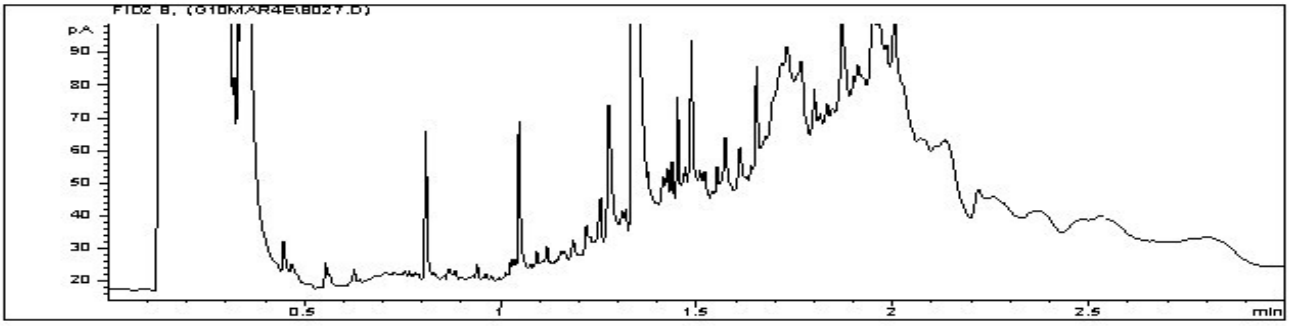
Success Through Science®

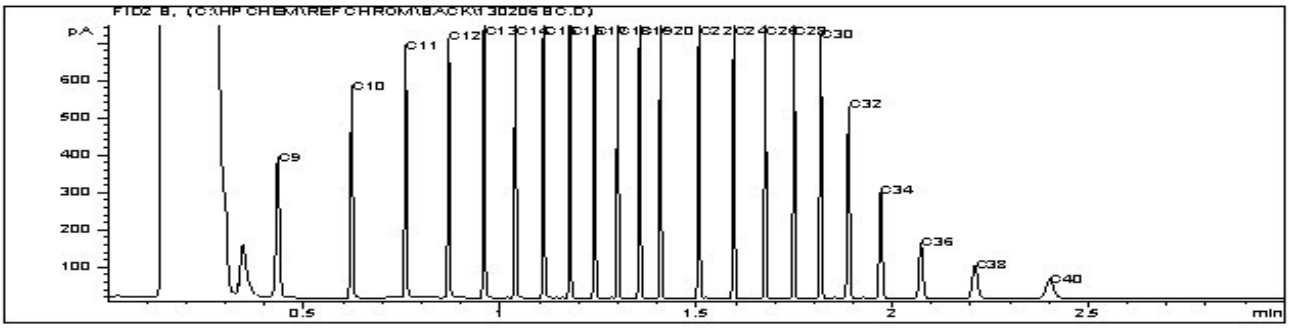
Report Date: 2013/03/12
Maxxam Job #: B316165
Maxxam Sample: FT1216

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-31-130228

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your C.O.C. #: 35326804, 35326805, 35326803

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/14
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B316601
Received: 2013/03/02, 09:45

Sample Matrix: Sediment
Samples Received: 22

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	13	2013/03/05	2013/03/06	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	9	2013/03/07	2013/03/08	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	13	2013/03/05	2013/03/06	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	9	2013/03/07	2013/03/11	BBY6SOP-00029	SM-2510 B
Elements by ICPMS (total)	22	2013/03/05	2013/03/05	BBY7SOP-00001	EPA 6020A
Metals - TCLP	2	2013/03/13	2013/03/14	BBY7SOP-00001	EPA 6020A
Moisture	22	N/A	2013/03/07	BBY8SOP-00017	Ont MOE -E 3139
Benzo[a]pyrene Equivalency	16	N/A	2013/03/08	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	6	N/A	2013/03/11	BBY WI-00033	CCME Guidelines
PAH in Soil by GC/MS Lowlevel (Extended)	11	2013/03/06	2013/03/07	BRN SOP-00332 R5.0	EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	5	2013/03/06	2013/03/08	BRN SOP-00332 R5.0	EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	6	2013/03/06	2013/03/09	BRN SOP-00332 R5.0	EPA 8270D
Total LMW, HMW, Total PAH Calc	16	N/A	2013/03/08	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	6	N/A	2013/03/11	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	22	2013/03/05	2013/03/05	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	13	2013/03/05	2013/03/05	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	9	2013/03/07	2013/03/07	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	2	N/A	2013/03/14	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	22	N/A	2013/03/05		
Saturated Paste	13	2013/03/05	2013/03/05	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	9	2013/03/07	2013/03/07	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	13	N/A	2013/03/07		
Soluble Ions Na, Cl	9	N/A	2013/03/08		
Sulphate (soluble) (soil)	13	2013/03/05	2013/03/06	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	9	2013/03/07	2013/03/08	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	13	N/A	2013/03/06	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	9	N/A	2013/03/07	BBY7SOP-00002	EPA 6020A

* Results relate only to the items tested.

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

PHYSICAL TESTING (SEDIMENT)

Maxxam ID		FT4311	FT4312	FT4313	FT4314	FT4315	FT4316	FT4317		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/03/01	2013/03/01		
	UNITS	**SP13-36-130228**	**SP13-35-130228**	**SP13-34-130228**	**SP13-33-130228**	**SP13-32-130228**	**SP13-37-130301**	**SP13-38-130301**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	15	20	15	20	15	20	19	0.30	6625121

Maxxam ID		FT4318	FT4319	FT4320	FT4321	FT4321	FT4322		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-39-130301**	**SP13-40-130301**	**SP13-40-01-130301**	**SP13-41-130301**	**SP13-41-130301 Lab-Dup**	**SP13-42-130301**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	18	19	18	19	18	20	0.30	6625121

Maxxam ID		FT4323		FT4324	FT4325	FT4326	FT4327	FT4327		
Sampling Date		2013/03/01		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-43-130301**	**QC Batch**	**SP13-44-130301**	**SP13-45-130301**	**SP13-46-130301**	**SP13-47-130301**	**SP13-47-130301 Lab-Dup**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	18	6625121	17	17	14	16	19	0.30	6626624

Maxxam ID		FT4328	FT4329	FT4330	FT4332	FT4333		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-48-130301**	**SP13-49-130301**	**SP13-50-130301**	**SP13-50-01-130301**	**SP13-51-130301**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	17	12	17	18	19	0.30	6626624

RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Maxxam ID		FT4318	FT4318	FT4330		
Sampling Date		2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-39-130301**	**SP13-39-130301 Lab-Dup**	**SP13-50-130301**	**RDL**	**QC Batch**
TCLP Extraction Procedure						
Initial pH of Sample	pH Units	8.40	8.34	8.77	N/A	6646952
pH after HCl	pH Units	1.94	1.98	1.95	N/A	6646952
Final pH of Leachate	pH Units	5.16	5.10	5.02	N/A	6646952
pH of Leaching Fluid	pH Units	4.90	4.90	4.90	N/A	6646952

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SEDIMENT)

Maxxam ID		FT4311		FT4312	FT4313	FT4314	FT4315	FT4316		
Sampling Date		2013/02/28		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/03/01		
	UNITS	**SP13-36-130228**	**QC Batch**	**SP13-35-130228**	**SP13-34-130228**	**SP13-33-130228**	**SP13-32-130228**	**SP13-37-130301**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	7.57	6619082	7.45	7.31	7.31	7.43	7.28	0.010	6619126
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	22500	6619065	22400	22300	23500	23900	22700	100	6619121
Total Antimony (Sb)	mg/kg	20.4	6619065	10.8	15.5	14.5	7.31	10.6	0.10	6619121
Total Arsenic (As)	mg/kg	41.4	6619065	36.1	36.6	30.7	21.8	25.7	0.50	6619121
Total Barium (Ba)	mg/kg	97.5	6619065	98.1	103	104	103	106	0.10	6619121
Total Beryllium (Be)	mg/kg	0.49	6619065	0.42	0.42	0.47	0.43	0.40	0.40	6619121
Total Bismuth (Bi)	mg/kg	0.17	6619065	0.19	0.19	0.13	0.13	0.15	0.10	6619121
Total Cadmium (Cd)	mg/kg	0.406	6619065	0.408	0.373	0.356	0.307	0.417	0.050	6619121
Total Calcium (Ca)	mg/kg	7430	6619065	9480	7510	8930	6560	7670	100	6619121
Total Chromium (Cr)	mg/kg	38.2	6619065	33.3	34.9	36.7	37.6	34.4	1.0	6619121
Total Cobalt (Co)	mg/kg	12.8	6619065	12.9	12.6	13.4	13.9	12.2	0.30	6619121
Total Copper (Cu)	mg/kg	91.9	6619065	132	84.0	80.3	74.8	69.8	0.50	6619121
Total Iron (Fe)	mg/kg	30000	6619065	29100	28600	29500	30800	27700	100	6619121
Total Lead (Pb)	mg/kg	59.5	6619065	40.8	48.6	36.0	29.4	36.7	0.10	6619121
Total Lithium (Li)	mg/kg	12.8	6619065	13.0	12.8	13.8	14.7	13.1	5.0	6619121
Total Magnesium (Mg)	mg/kg	6480	6619065	6750	6700	7090	7250	6590	100	6619121
Total Manganese (Mn)	mg/kg	470	6619065	634	578	576	605	593	0.20	6619121
Total Mercury (Hg)	mg/kg	0.191	6619065	0.123	0.104	0.107	0.112	0.117	0.050	6619121
Total Molybdenum (Mo)	mg/kg	2.52	6619065	2.66	2.45	2.46	1.37	1.74	0.10	6619121
Total Nickel (Ni)	mg/kg	27.2	6619065	26.5	27.8	28.1	30.1	28.0	0.80	6619121
Total Phosphorus (P)	mg/kg	478	6619065	562	576	602	550	595	10	6619121
Total Potassium (K)	mg/kg	674	6619065	740	733	758	723	725	100	6619121
Total Selenium (Se)	mg/kg	<0.50	6619065	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6619121
Total Silver (Ag)	mg/kg	0.117	6619065	0.125	0.112	0.125	0.083	0.093	0.050	6619121
Total Sodium (Na)	mg/kg	223	6619065	177	186	194	199	201	100	6619121
Total Strontium (Sr)	mg/kg	40.9	6619065	45.1	38.5	42.9	44.2	42.9	0.10	6619121
Total Thallium (Tl)	mg/kg	0.073	6619065	0.066	0.082	0.077	0.067	0.070	0.050	6619121
Total Tin (Sn)	mg/kg	7.77	6619065	3.10	3.51	3.47	2.34	2.55	0.10	6619121
Total Titanium (Ti)	mg/kg	835	6619065	918	871	958	1040	922	1.0	6619121
Total Uranium (U)	mg/kg	0.681	6619065	0.886	0.694	0.651	0.580	0.632	0.050	6619121
Total Vanadium (V)	mg/kg	72.7	6619065	72.0	70.8	74.4	77.4	69.9	2.0	6619121
Total Zinc (Zn)	mg/kg	279	6619065	285	304	217	175	211	1.0	6619121
Total Zirconium (Zr)	mg/kg	3.36	6619065	3.26	2.70	3.61	3.19	3.20	0.50	6619121

RDL = Reportable Detection Limit

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SEDIMENT)

Maxxam ID		FT4317	FT4318	FT4319	FT4320	FT4321	FT4322		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-38-130301**	**SP13-39-130301**	**SP13-40-130301**	**SP13-40-01-130301**	**SP13-41-130301**	**SP13-42-130301**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.19	7.23	7.52	7.48	7.53	7.20	0.010	6619126
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22300	22400	21500	20600	22700	22200	100	6619121
Total Antimony (Sb)	mg/kg	10.7	7.74	27.8	26.8	18.1	9.03	0.10	6619121
Total Arsenic (As)	mg/kg	24.3	15.5	52.8	52.2	40.2	23.2	0.50	6619121
Total Barium (Ba)	mg/kg	107	103	104	99.2	106	102	0.10	6619121
Total Beryllium (Be)	mg/kg	0.44	0.44	<0.40	0.47	<0.40	<0.40	0.40	6619121
Total Bismuth (Bi)	mg/kg	0.15	0.11	0.29	0.25	0.18	0.11	0.10	6619121
Total Cadmium (Cd)	mg/kg	0.281	0.289	0.373	0.445	0.392	0.348	0.050	6619121
Total Calcium (Ca)	mg/kg	6370	8000	7620	7230	8830	7830	100	6619121
Total Chromium (Cr)	mg/kg	34.2	34.9	36.7	33.9	38.0	34.8	1.0	6619121
Total Cobalt (Co)	mg/kg	12.9	11.8	12.5	13.3	14.0	13.3	0.30	6619121
Total Copper (Cu)	mg/kg	71.8	2830	136	118	109	73.8	0.50	6619121
Total Iron (Fe)	mg/kg	28000	26900	28000	27500	30100	28500	100	6619121
Total Lead (Pb)	mg/kg	37.2	27.5	77.3	67.3	58.0	37.2	0.10	6619121
Total Lithium (Li)	mg/kg	13.5	13.1	12.8	12.2	14.4	13.1	5.0	6619121
Total Magnesium (Mg)	mg/kg	6880	6750	6310	6250	7430	6710	100	6619121
Total Manganese (Mn)	mg/kg	586	667	540	538	606	577	0.20	6619121
Total Mercury (Hg)	mg/kg	0.109	0.112	0.197	0.196	0.164	0.121	0.050	6619121
Total Molybdenum (Mo)	mg/kg	1.75	1.36	3.00	4.02	3.73	1.71	0.10	6619121
Total Nickel (Ni)	mg/kg	27.2	27.2	28.3	26.7	31.1	26.8	0.80	6619121
Total Phosphorus (P)	mg/kg	621	606	589	568	651	627	10	6619121
Total Potassium (K)	mg/kg	722	663	712	675	756	771	100	6619121
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6619121
Total Silver (Ag)	mg/kg	0.108	0.231	0.138	0.145	0.115	0.097	0.050	6619121
Total Sodium (Na)	mg/kg	171	180	228	229	224	200	100	6619121
Total Strontium (Sr)	mg/kg	40.1	50.3	46.5	44.1	52.9	47.2	0.10	6619121
Total Thallium (Tl)	mg/kg	0.076	0.062	0.085	0.079	0.072	0.073	0.050	6619121
Total Tin (Sn)	mg/kg	2.69	48.2	6.01	6.42	4.35	2.59	0.10	6619121
Total Titanium (Ti)	mg/kg	881	952	887	869	976	908	1.0	6619121
Total Uranium (U)	mg/kg	0.559	0.511	0.709	0.660	0.653	0.507	0.050	6619121
Total Vanadium (V)	mg/kg	70.3	72.2	68.4	66.8	75.8	70.8	2.0	6619121
Total Zinc (Zn)	mg/kg	211	195	379	352	321	218	1.0	6619121
Total Zirconium (Zr)	mg/kg	3.11	3.29	2.64	2.60	2.99	2.62	0.50	6619121

RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SEDIMENT)

Maxxam ID		FT4323	FT4324	FT4325	FT4326	FT4327	FT4328		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-43-130301**	**SP13-44-130301**	**SP13-45-130301**	**SP13-46-130301**	**SP13-47-130301**	**SP13-48-130301**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.64	7.73	7.59	7.29	7.39	7.50	0.010	6619126
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22500	20300	21200	22100	22200	23400	100	6619121
Total Antimony (Sb)	mg/kg	12.6	31.5	17.7	23.5	15.3	11.1	0.10	6619121
Total Arsenic (As)	mg/kg	32.0	67.8	43.4	54.0	30.7	31.7	0.50	6619121
Total Barium (Ba)	mg/kg	110	112	105	117	105	114	0.10	6619121
Total Beryllium (Be)	mg/kg	0.51	<0.40	<0.40	<0.40	<0.40	0.42	0.40	6619121
Total Bismuth (Bi)	mg/kg	0.18	0.28	0.20	0.25	0.17	0.16	0.10	6619121
Total Cadmium (Cd)	mg/kg	0.414	0.444	0.443	0.437	0.401	0.404	0.050	6619121
Total Calcium (Ca)	mg/kg	12000	8120	9940	7680	7380	7960	100	6619121
Total Chromium (Cr)	mg/kg	34.6	38.8	34.9	35.5	35.1	41.2	1.0	6619121
Total Cobalt (Co)	mg/kg	13.0	13.8	13.9	14.0	12.5	13.3	0.30	6619121
Total Copper (Cu)	mg/kg	106	154	120	137	101	103	0.50	6619121
Total Iron (Fe)	mg/kg	28900	29500	29400	29800	28800	29600	100	6619121
Total Lead (Pb)	mg/kg	57.7	101	92.2	80.9	55.1	63.5	0.10	6619121
Total Lithium (Li)	mg/kg	12.9	11.9	12.1	12.9	13.1	13.8	5.0	6619121
Total Magnesium (Mg)	mg/kg	7010	6830	6680	6610	6710	7090	100	6619121
Total Manganese (Mn)	mg/kg	663	533	561	596	588	621	0.20	6619121
Total Mercury (Hg)	mg/kg	0.162	0.249	0.200	0.153	0.137	0.171	0.050	6619121
Total Molybdenum (Mo)	mg/kg	2.78	5.46	3.27	3.26	2.22	2.60	0.10	6619121
Total Nickel (Ni)	mg/kg	28.0	28.8	27.5	27.5	27.5	30.3	0.80	6619121
Total Phosphorus (P)	mg/kg	756	602	648	605	659	691	10	6619121
Total Potassium (K)	mg/kg	725	707	684	774	711	765	100	6619121
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6619121
Total Silver (Ag)	mg/kg	0.117	0.141	0.123	0.151	0.094	0.155	0.050	6619121
Total Sodium (Na)	mg/kg	233	223	250	223	204	206	100	6619121
Total Strontium (Sr)	mg/kg	64.4	51.5	53.6	49.0	43.8	47.6	0.10	6619121
Total Thallium (Tl)	mg/kg	0.070	0.087	0.076	0.092	0.073	0.077	0.050	6619121
Total Tin (Sn)	mg/kg	4.68	8.74	4.23	6.07	3.23	3.24	0.10	6619121
Total Titanium (Ti)	mg/kg	910	880	987	922	974	975	1.0	6619121
Total Uranium (U)	mg/kg	0.749	0.767	0.793	0.777	0.622	0.684	0.050	6619121
Total Vanadium (V)	mg/kg	69.8	67.0	69.8	69.5	71.1	73.0	2.0	6619121
Total Zinc (Zn)	mg/kg	304	449	387	460	287	298	1.0	6619121
Total Zirconium (Zr)	mg/kg	2.72	2.28	2.71	2.62	2.80	2.88	0.50	6619121

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SEDIMENT)

Maxxam ID		FT4329	FT4330		FT4332	FT4333		
Sampling Date		2013/03/01	2013/03/01		2013/03/01	2013/03/01		
	UNITS	**SP13-49-130301**	**SP13-50-130301**	**QC Batch**	**SP13-50-01-130301**	**SP13-51-130301**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.46	7.43	6619126	7.44	7.22	0.010	6619147
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	21400	21400	6619121	21100	21900	100	6619129
Total Antimony (Sb)	mg/kg	27.1	57.5	6619121	66.6	24.6	0.10	6619129
Total Arsenic (As)	mg/kg	53.9	103	6619121	133	45.9	0.50	6619129
Total Barium (Ba)	mg/kg	116	132	6619121	122	103	0.10	6619129
Total Beryllium (Be)	mg/kg	<0.40	0.40	6619121	0.43	0.45	0.40	6619129
Total Bismuth (Bi)	mg/kg	0.19	0.32	6619121	0.28	0.17	0.10	6619129
Total Cadmium (Cd)	mg/kg	0.394	0.613	6619121	0.485	0.406	0.050	6619129
Total Calcium (Ca)	mg/kg	7090	9950	6619121	10300	6920	100	6619129
Total Chromium (Cr)	mg/kg	35.2	43.2	6619121	36.9	33.4	1.0	6619129
Total Cobalt (Co)	mg/kg	13.1	16.7	6619121	17.6	12.4	0.30	6619129
Total Copper (Cu)	mg/kg	108	142	6619121	156	83.6	0.50	6619129
Total Iron (Fe)	mg/kg	27800	31500	6619121	31000	27200	100	6619129
Total Lead (Pb)	mg/kg	72.3	144	6619121	122	58.3	0.10	6619129
Total Lithium (Li)	mg/kg	12.4	12.7	6619121	12.8	12.5	5.0	6619129
Total Magnesium (Mg)	mg/kg	6470	6730	6619121	6540	6360	100	6619129
Total Manganese (Mn)	mg/kg	566	614	6619121	539	542	0.20	6619129
Total Mercury (Hg)	mg/kg	0.208	0.154	6619121	0.133	0.109	0.050	6619129
Total Molybdenum (Mo)	mg/kg	3.56	4.78	6619121	7.23	2.77	0.10	6619129
Total Nickel (Ni)	mg/kg	27.1	29.4	6619121	27.8	26.3	0.80	6619129
Total Phosphorus (P)	mg/kg	600	641	6619121	759	579	10	6619129
Total Potassium (K)	mg/kg	694	769	6619121	778	689	100	6619129
Total Selenium (Se)	mg/kg	<0.50	<0.50	6619121	<0.50	<0.50	0.50	6619129
Total Silver (Ag)	mg/kg	0.153	0.232	6619121	0.188	0.121	0.050	6619129
Total Sodium (Na)	mg/kg	213	342	6619121	362	211	100	6619129
Total Strontium (Sr)	mg/kg	44.7	72.3	6619121	71.3	43.3	0.10	6619129
Total Thallium (Tl)	mg/kg	0.077	0.103	6619121	0.121	0.077	0.050	6619129
Total Tin (Sn)	mg/kg	5.32	9.13	6619121	9.60	4.37	0.10	6619129
Total Titanium (Ti)	mg/kg	865	915	6619121	866	893	1.0	6619129
Total Uranium (U)	mg/kg	0.756	0.716	6619121	0.740	0.556	0.050	6619129
Total Vanadium (V)	mg/kg	68.0	70.5	6619121	66.0	67.4	2.0	6619129
Total Zinc (Zn)	mg/kg	357	635	6619121	598	284	1.0	6619129
Total Zirconium (Zr)	mg/kg	2.57	2.95	6619121	2.89	3.10	0.50	6619129

RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

TCLP METALS (SEDIMENT)

Maxxam ID		FT4318	FT4318	FT4330		
Sampling Date		2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-39-130301**	**SP13-39-130301 Lab-Dup**	**SP13-50-130301**	**RDL**	**QC Batch**
Metals						
LEACHATE Arsenic (As)	mg/L			<0.10	0.10	6650584
LEACHATE Copper (Cu)	mg/L	<0.10	<0.10		0.10	6650584
LEACHATE Lead (Pb)	mg/L			<0.10	0.10	6650584

RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SEDIMENT)

Maxxam ID		FT4311	FT4312	FT4313	FT4314	FT4315	FT4316		
Sampling Date		2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/02/28	2013/03/01		
	UNITS	**SP13-36-130228**	**SP13-35-130228**	**SP13-34-130228**	**SP13-33-130228**	**SP13-32-130228**	**SP13-37-130301**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.2	0.87	0.89	4.0	1.4	0.99	0.10	6613277
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	0.32	0.11	<0.10	0.10	6613277
Polycyclic Aromatics									
Naphthalene	mg/kg	0.028(1)	0.013(1)	0.011(1)	0.020(1)	0.018(1)	0.017(1)	0.010	6627252
2-Methylnaphthalene	mg/kg	0.035(1)	0.013(1)	<0.010(1)	0.017(1)	0.013(1)	0.012(1)	0.010	6627252
Acenaphthylene	mg/kg	0.012(1)	0.0081(1)	0.0092(1)	0.022(1)	0.011(1)	0.0090(1)	0.0050	6627252
Acenaphthene	mg/kg	0.016(1)	0.0096(1)	0.0074(1)	0.035(1)	0.0081(1)	0.0096(1)	0.0050	6627252
Fluorene	mg/kg	0.021(1)	0.011(1)	<0.010(1)	0.046(1)	<0.010(1)	0.011(1)	0.010	6627252
Phenanthrene	mg/kg	0.10(1)	0.061(1)	0.017(1)	0.31(1)	0.098(1)	0.066(1)	0.010	6627252
Anthracene	mg/kg	0.038(1)	0.024(1)	0.021(1)	0.13(1)	0.032(1)	0.025(1)	0.010	6627252
Fluoranthene	mg/kg	0.15(1)	0.11(1)	0.11(1)	0.51(1)	0.16(1)	0.12(1)	0.010	6627252
Pyrene	mg/kg	0.15(1)	0.11(1)	0.11(1)	0.47(1)	0.16(1)	0.12(1)	0.010	6627252
Benzo(a)anthracene	mg/kg	0.052(1)	0.038(1)	0.041(1)	0.20(1)	0.054(1)	0.042(1)	0.010	6627252
Chrysene	mg/kg	0.077(1)	0.050(1)	0.052(1)	0.27(1)	0.079(1)	0.076(1)	0.010	6627252
Benzo(b&j)fluoranthene	mg/kg	0.088(1)	0.066(1)	0.067(1)	0.29(1)	0.10(1)	0.074(1)	0.010	6627252
Benzo(k)fluoranthene	mg/kg	0.030(1)	0.023(1)	0.023(1)	0.10(1)	0.039(1)	0.026(1)	0.010	6627252
Benzo(a)pyrene	mg/kg	0.064(1)	0.049(1)	0.050(1)	0.21(1)	0.076(1)	0.055(1)	0.010	6627252
Indeno(1,2,3-cd)pyrene	mg/kg	0.037(1)	0.028(1)	0.029(1)	0.11(1)	0.049(1)	0.032(1)	0.020	6627252
Dibenz(a,h)anthracene	mg/kg	0.0079(1)	0.0057(1)	0.0058(1)	0.039(1)	0.0090(1)	0.0063(1)	0.0050	6627252
Benzo(g,h,i)perylene	mg/kg	0.043(1)	0.033(1)	0.032(1)	0.11(1)	0.055(1)	0.037(1)	0.020	6627252
Low Molecular Weight PAH`s	mg/kg	0.25	0.14	0.065	0.58	0.18	0.15	0.010	6613184
High Molecular Weight PAH`s	mg/kg	0.50	0.36	0.37	1.7	0.54	0.42	0.010	6613184
Total PAH	mg/kg	0.75	0.50	0.43	2.3	0.72	0.57	0.010	6613184
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	128	124	127	123	100	129		6627252
D8-ACENAPHTHYLENE (sur.)	%	82	75	75	77	78	76		6627252
D8-NAPHTHALENE (sur.)	%	84	79	77	80	81	77		6627252
TERPHENYL-D14 (sur.)	%	102	97	95	98	99	95		6627252

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SEDIMENT)

Maxxam ID		FT4317	FT4318	FT4319	FT4320	FT4321	FT4322		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-38-130301**	**SP13-39-130301**	**SP13-40-130301**	**SP13-40-01-130301**	**SP13-41-130301**	**SP13-42-130301**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.96	1.7	2.0	1.8	1.7	1.1	0.10	6613277
Benzo[a]pyrene equivalency	N/A	<0.10	0.14	0.17	0.16	0.14	<0.10	0.10	6613277
Polycyclic Aromatics									
Naphthalene	mg/kg	0.010(1)	0.020(1)	0.065(1)	0.033(1)	0.032(1)	<0.010(1)	0.010	6627252
2-Methylnaphthalene	mg/kg	0.011(1)	0.016(1)	0.041(1)	0.034(1)	0.023(1)	<0.010(1)	0.010	6627252
Acenaphthylene	mg/kg	0.0095(1)	0.013(1)	0.015(1)	0.016(1)	0.016(1)	0.010(1)	0.0050	6627252
Acenaphthene	mg/kg	0.0069(1)	0.017(1)	0.049(1)	0.021(1)	0.030(1)	0.0092(1)	0.0050	6627252
Fluorene	mg/kg	<0.010(1)	0.025(1)	0.053(1)	0.024(1)	0.038(1)	0.010(1)	0.010	6627252
Phenanthrene	mg/kg	0.066(1)	0.050(1)	0.25(1)	0.14(1)	0.17(1)	0.077(1)	0.010	6627252
Anthracene	mg/kg	0.026(1)	0.061(1)	0.096(1)	0.064(1)	0.075(1)	0.037(1)	0.010	6627252
Fluoranthene	mg/kg	0.13(1)	0.24(1)	0.28(1)	0.19(1)	0.23(1)	0.13(1)	0.010	6627252
Pyrene	mg/kg	0.12(1)	0.23(1)	0.29(1)	0.22(1)	0.22(1)	0.12(1)	0.010	6627252
Benzo(a)anthracene	mg/kg	0.046(1)	0.087(1)	0.11(1)	0.080(1)	0.081(1)	0.052(1)	0.010	6627252
Chrysene	mg/kg	0.059(1)	0.10(1)	0.14(1)	0.12(1)	0.10(1)	0.064(1)	0.010	6627252
Benzo(b&j)fluoranthene	mg/kg	0.071(1)	0.12(1)	0.14(1)	0.13(1)	0.13(1)	0.081(1)	0.010	6627252
Benzo(k)fluoranthene	mg/kg	0.026(1)	0.043(1)	0.051(1)	0.046(1)	0.045(1)	0.029(1)	0.010	6627252
Benzo(a)pyrene	mg/kg	0.052(1)	0.097(1)	0.11(1)	0.11(1)	0.10(1)	0.062(1)	0.010	6627252
Indeno(1,2,3-cd)pyrene	mg/kg	0.028(1)	0.050(1)	0.059(1)	0.057(1)	0.055(1)	0.035(1)	0.020	6627252
Dibenz(a,h)anthracene	mg/kg	0.0057(1)	0.010(1)	0.013(1)	0.013(1)	0.012(1)	0.0066(1)	0.0050	6627252
Benzo(g,h,i)perylene	mg/kg	0.032(1)	0.054(1)	0.066(1)	0.074(1)	0.060(1)	0.038(1)	0.020	6627252
Low Molecular Weight PAH`s	mg/kg	0.13	0.20	0.56	0.33	0.38	0.14	0.010	6613184
High Molecular Weight PAH`s	mg/kg	0.42	0.77	0.94	0.73	0.75	0.43	0.010	6613184
Total PAH	mg/kg	0.55	0.97	1.5	1.1	1.1	0.58	0.010	6613184
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	127	130	129	121	128	129		6627252
D8-ACENAPHTHYLENE (sur.)	%	76	75	78	77	76	79		6627252
D8-NAPHTHALENE (sur.)	%	78	78	80	81	79	81		6627252
TERPHENYL-D14 (sur.)	%	96	95	98	100	97	100		6627252

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SEDIMENT)

Maxxam ID		FT4323	FT4324	FT4325	FT4326		FT4327		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01		2013/03/01		
	UNITS	**SP13-43-130301**	**SP13-44-130301**	**SP13-45-130301**	**SP13-46-130301**	**QC Batch**	**SP13-47-130301**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.7	2.2	1.5	2.0	6613277	1.7	0.10	6613277
Benzo[a]pyrene equivalency	N/A	0.14	0.19	0.12	0.16	6613277	0.14	0.10	6613277
Polycyclic Aromatics									
Naphthalene	mg/kg	0.016(1)	0.033(1)	0.050(1)	0.028(1)	6627252	0.025(1)	0.010	6633894
2-Methylnaphthalene	mg/kg	0.015(1)	0.020(1)	0.023(1)	0.020(1)	6627252	0.025(1)	0.010	6633894
Acenaphthylene	mg/kg	0.021(1)	0.022(1)	0.015(1)	0.019(1)	6627252	0.015(1)	0.0050	6633894
Acenaphthene	mg/kg	0.012(1)	0.023(1)	0.025(1)	0.023(1)	6627252	0.029(1)	0.0050	6633894
Fluorene	mg/kg	0.013(1)	0.028(1)	0.029(1)	0.025(1)	6627252	0.029(1)	0.010	6633894
Phenanthrene	mg/kg	0.085(1)	0.17(1)	0.15(1)	0.16(1)	6627252	0.15(1)	0.010	6633894
Anthracene	mg/kg	0.042(1)	0.10(1)	0.062(1)	0.063(1)	6627252	0.048(1)	0.010	6633894
Fluoranthene	mg/kg	0.18(1)	0.27(1)	0.20(1)	0.25(1)	6627252	0.21(1)	0.010	6633894
Pyrene	mg/kg	0.19(1)	0.26(1)	0.20(1)	0.25(1)	6627252	0.21(1)	0.010	6633894
Benzo(a)anthracene	mg/kg	0.078(1)	0.11(1)	0.071(1)	0.088(1)	6627252	0.084(1)	0.010	6633894
Chrysene	mg/kg	0.094(1)	0.15(1)	0.087(1)	0.12(1)	6627252	0.11(1)	0.010	6633894
Benzo(b&j)fluoranthene	mg/kg	0.12(1)	0.16(1)	0.11(1)	0.15(1)	6627252	0.12(1)	0.010	6633894
Benzo(k)fluoranthene	mg/kg	0.045(1)	0.059(1)	0.040(1)	0.054(1)	6627252	0.046(1)	0.010	6633894
Benzo(a)pyrene	mg/kg	0.096(1)	0.13(1)	0.085(1)	0.11(1)	6627252	0.092(1)	0.010	6633894
Indeno(1,2,3-cd)pyrene	mg/kg	0.053(1)	0.071(1)	0.048(1)	0.063(1)	6627252	0.055(1)	0.020	6633894
Dibenz(a,h)anthracene	mg/kg	0.011(1)	0.014(1)	0.0094(1)	0.012(1)	6627252	0.016(1)	0.0050	6633894
Benzo(g,h,i)perylene	mg/kg	0.058(1)	0.077(1)	0.053(1)	0.069(1)	6627252	0.062(1)	0.020	6633894
Low Molecular Weight PAH`s	mg/kg	0.20	0.40	0.35	0.34	6613184	0.32	0.010	6613184
High Molecular Weight PAH`s	mg/kg	0.65	0.93	0.65	0.83	6613184	0.71	0.010	6613184
Total PAH	mg/kg	0.85	1.3	1.0	1.2	6613184	1.0	0.010	6613184
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	126	119	127	128	6627252	94		6633894
D8-ACENAPHTHYLENE (sur.)	%	76	75	76	73	6627252	72		6633894
D8-NAPHTHALENE (sur.)	%	80	78	79	76	6627252	73		6633894
TERPHENYL-D14 (sur.)	%	98	86	96	94	6627252	83		6633894

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SEDIMENT)

Maxxam ID		FT4328	FT4329	FT4330	FT4332	FT4333		
Sampling Date		2013/03/01	2013/03/01	2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-48-130301**	**SP13-49-130301**	**SP13-50-130301**	**SP13-50-01-130301**	**SP13-51-130301**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	2.6	1.8	2.7	3.2	2.8	0.10	6613277
Benzo[a]pyrene equivalency	N/A	0.21	0.15	0.22	0.26	0.17	0.10	6613277
Polycyclic Aromatics								
Naphthalene	mg/kg	0.082(1)	0.047(1)	0.026(1)	0.030(1)	0.028(1)	0.010	6633894
2-Methylnaphthalene	mg/kg	0.037(1)	0.021(1)	0.019(1)	0.029(1)	0.018(1)	0.010	6633894
Acenaphthylene	mg/kg	0.018(1)	0.015(1)	0.021(1)	0.027(1)	0.016(1)	0.0050	6633894
Acenaphthene	mg/kg	0.053(1)	0.026(1)	0.021(1)	0.031(1)	0.019(1)	0.0050	6633894
Fluorene	mg/kg	0.053(1)	0.018(1)	0.023(1)	0.033(1)	0.020(1)	0.010	6633894
Phenanthrene	mg/kg	0.32(1)	0.12(1)	0.19(1)	0.25(1)	0.14(1)	0.010	6633894
Anthracene	mg/kg	0.098(1)	0.034(1)	0.057(1)	0.084(1)	0.24(1)	0.010	6633894
Fluoranthene	mg/kg	0.34(1)	0.21(1)	0.32(1)	0.38(1)	0.52(1)	0.010	6633894
Pyrene	mg/kg	0.33(1)	0.20(1)	0.30(1)	0.37(1)	0.40(1)	0.010	6633894
Benzo(a)anthracene	mg/kg	0.13(1)	0.089(1)	0.12(1)	0.15(1)	0.23(1)	0.010	6633894
Chrysene	mg/kg	0.15(1)	0.11(1)	0.16(1)	0.19(1)	0.29(1)	0.010	6633894
Benzo(b&j)fluoranthene	mg/kg	0.19(1)	0.14(1)	0.20(1)	0.23(1)	0.20(1)	0.010	6633894
Benzo(k)fluoranthene	mg/kg	0.058(1)	0.040(1)	0.065(1)	0.088(1)	0.060(1)	0.010	6633894
Benzo(a)pyrene	mg/kg	0.14(1)	0.097(1)	0.14(1)	0.17(1)	0.099(1)	0.010	6633894
Indeno(1,2,3-cd)pyrene	mg/kg	0.082(1)	0.059(1)	0.090(1)	0.11(1)	0.059(1)	0.020	6633894
Dibenz(a,h)anthracene	mg/kg	0.023(1)	0.017(1)	0.024(1)	0.029(1)	0.017(1)	0.0050	6633894
Benzo(g,h,i)perylene	mg/kg	0.093(1)	0.064(1)	0.10(1)	0.12(1)	0.065(1)	0.020	6633894
Low Molecular Weight PAH`s	mg/kg	0.66	0.28	0.35	0.49	0.48	0.010	6613184
High Molecular Weight PAH`s	mg/kg	1.1	0.72	1.1	1.3	1.6	0.010	6613184
Total PAH	mg/kg	1.8	1.0	1.4	1.8	2.0	0.010	6613184
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	98	95	103	106	97		6633894
D8-ACENAPHTHYLENE (sur.)	%	76	74	81	74	69		6633894
D8-NAPHTHALENE (sur.)	%	77	74	81	76	72		6633894
TERPHENYL-D14 (sur.)	%	87	85	94	88	84		6633894

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SEDIMENT)

Maxxam ID		FT4311		FT4312		FT4313		FT4314		FT4315		
Sampling Date		2013/02/28		2013/02/28		2013/02/28		2013/02/28		2013/02/28		
	UNITS	**SP13-36-130228**	**RDL**	**SP13-35-130228**	**RDL**	**SP13-34-130228**	**RDL**	**SP13-33-130228**	**RDL**	**SP13-32-130228**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	20	10	10	10	11	10	<10	10	15	10	6625951
Soluble Chloride (Cl)	mg/L	59.0	5.0	22.2	5.0	23.6	5.0	27.3	5.0	19.4	5.0	6625944
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	25.7	2.2	10.4	2.3	10.0	2.1	11.9	2.2	8.2	2.1	6613279
Soluble Sodium (Na)	mg/kg	11.8	2.2	8.1	2.3	6.5	2.1	11.0	2.2	8.8	2.1	6613279
Soluble Parameters												
Soluble Conductivity	uS/cm	440	1.0	329	1.0	316	1.0	378	1.0	281	1.0	6619620
Soluble pH	pH Units	7.18	N/A	7.05	N/A	7.07	N/A	6.97	N/A	7.10	N/A	6619618
Wet Soluble Calcium (Ca)	mg/L	61.5	5.0	49.7	5.0	52.3	5.0	52.7	5.0	40.5	5.0	6623530
Saturation %	%	43.6	1.0	46.9	1.0	42.6	1.0	43.7	1.0	42.2	1.0	6619605
Wet Soluble Magnesium (Mg)	mg/L	16.1	5.0	11.7	5.0	13.7	5.0	17.2	5.0	16.5	5.0	6623530
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6623530
Wet Soluble Sodium (Na)	mg/L	27.0	5.0	17.3	5.0	15.3	5.0	25.2	5.0	20.8	5.0	6623530
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	<30	30	6623530
Sodium Adsorption Ratio	N/A	0.79	0.10	0.57	0.10	0.49	0.10	0.77	0.10	0.70	0.10	6613278

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SEDIMENT)

Maxxam ID		FT4316		FT4317	FT4318		FT4319		FT4320		
Sampling Date		2013/03/01		2013/03/01	2013/03/01		2013/03/01		2013/03/01		
	UNITS	**SP13-37-130301**	**RDL**	**SP13-38-130301**	**SP13-39-130301**	**RDL**	**SP13-40-130301**	**RDL**	**SP13-40-01-130301**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	10	10	<10	<10	10	15	10	18	10	6625951
Soluble Chloride (Cl)	mg/L	19.3	5.0	20.9	20.7	5.0	27.4	5.0	28.6	5.0	6625944
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	8.0	2.1	8.5	8.2	2.0	11.3	2.1	11.6	2.0	6613279
Soluble Sodium (Na)	mg/kg	5.6	2.1	5.6	5.1	2.0	8.1	2.1	8.6	2.0	6613279
Soluble Parameters											
Soluble Conductivity	uS/cm	271	1.0	237	231	1.0	287	1.0	342	1.0	6619620
Soluble pH	pH Units	6.95	N/A	6.87	6.88	N/A	7.18	N/A	7.14	N/A	6619618
Wet Soluble Calcium (Ca)	mg/L	46.5	5.0	39.8	33.6	5.0	44.5	5.0	47.8	5.0	6623530
Saturation %	%	41.7	1.0	40.8	39.4	1.0	41.1	1.0	40.5	1.0	6619605
Wet Soluble Magnesium (Mg)	mg/L	15.9	5.0	14.2	10.9	5.0	14.3	5.0	14.5	5.0	6623530
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	20	<20	20	<20	20	6623530
Wet Soluble Sodium (Na)	mg/L	13.5	5.0	13.8	13.1	5.0	19.7	5.0	21.2	5.0	6623530
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	30	<30	30	<30	30	6623530
Sodium Adsorption Ratio	N/A	0.44	0.10	0.48	0.50	0.10	0.66	0.10	0.69	0.10	6613278

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SEDIMENT)

Maxxam ID		FT4321	FT4322		FT4323		FT4324	FT4324		
Sampling Date		2013/03/01	2013/03/01		2013/03/01		2013/03/01	2013/03/01		
	UNITS	**SP13-41-130301**	**SP13-42-130301**	**RDL**	**SP13-43-130301**	**QC Batch**	**SP13-44-130301**	**SP13-44-130301 Lab-Dup**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	29	12	10	31	6625951	70	70	10	6632146
Soluble Chloride (Cl)	mg/L	21.9	27.5	5.0	28.1	6625944	28.9	34.2	5.0	6632144
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	9.6	12.3	2.2	11.8	6613279	11.9		2.1	6613279
Soluble Sodium (Na)	mg/kg	7.9	7.0	2.2	6.9	6613279	22.7		2.1	6613279
Soluble Parameters										
Soluble Conductivity	uS/cm	360	399	1.0	336	6619620	394	435	1.0	6627447
Soluble pH	pH Units	7.11	6.93	N/A	7.23	6619618	7.25	7.29	N/A	6627422
Wet Soluble Calcium (Ca)	mg/L	59.4	65.2	5.0	51.2	6623530	50.5	54.2	5.0	6630839
Saturation %	%	44.0	44.8	1.0	42.1	6619605	41.2	41.2	1.0	6627416
Wet Soluble Magnesium (Mg)	mg/L	14.6	13.9	5.0	11.6	6623530	26.8	33.6	5.0	6630839
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	6623530	<20	21	20	6630839
Wet Soluble Sodium (Na)	mg/L	18.0	15.5	5.0	16.5	6623530	55.0	65.2	5.0	6630839
Wet Soluble Sulphur (S)	mg/L	<30	<30	30	<30	6623530	<30	<30	30	6630839
Sodium Adsorption Ratio	N/A	0.54	0.46	0.10	0.54	6613278	1.56		0.10	6613278

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SEDIMENT)

Maxxam ID		FT4325		FT4326		FT4327		FT4328		
Sampling Date		2013/03/01		2013/03/01		2013/03/01		2013/03/01		
	UNITS	**SP13-45-130301**	**RDL**	**SP13-46-130301**	**RDL**	**SP13-47-130301**	**RDL**	**SP13-48-130301**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	51	10	44	10	41	10	38	10	6632146
Soluble Chloride (Cl)	mg/L	38.8	5.0	36.8	5.0	29.4	5.0	28.1	5.0	6632144
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	16.8	2.2	15.6	2.1	13.8	2.4	12.9	2.3	6613279
Soluble Sodium (Na)	mg/kg	21.7	2.2	22.7	2.1	19.9	2.4	19.2	2.3	6613279
Soluble Parameters										
Soluble Conductivity	uS/cm	427	1.0	398	1.0	379	1.0	338	1.0	6627447
Soluble pH	pH Units	7.24	N/A	7.08	N/A	7.15	N/A	7.17	N/A	6627422
Wet Soluble Calcium (Ca)	mg/L	50.5	5.0	51.8	5.0	44.6	5.0	41.2	5.0	6630839
Saturation %	%	43.3	1.0	42.5	1.0	47.1	1.0	45.9	1.0	6627416
Wet Soluble Magnesium (Mg)	mg/L	21.7	5.0	28.9	5.0	20.4	5.0	19.7	5.0	6630839
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6630839
Wet Soluble Sodium (Na)	mg/L	50.2	5.0	53.4	5.0	42.3	5.0	41.9	5.0	6630839
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6630839
Sodium Adsorption Ratio	N/A	1.49	0.10	1.47	0.10	1.32	0.10	1.35	0.10	6613278

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SEDIMENT)

Maxxam ID		FT4329		FT4330	FT4332	FT4333		
Sampling Date		2013/03/01		2013/03/01	2013/03/01	2013/03/01		
	UNITS	**SP13-49-130301**	**RDL**	**SP13-50-130301**	**SP13-50-01-130301**	**SP13-51-130301**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	53	10	75	67	52	10	6632146
Soluble Chloride (Cl)	mg/L	30.6	5.0	25.9	30.2	25.9	5.0	6632144
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	11.9	1.9	10.3	12.0	10.1	2.0	6613279
Soluble Sodium (Na)	mg/kg	18.9	1.9	22.0	21.2	18.8	2.0	6613279
Soluble Parameters								
Soluble Conductivity	uS/cm	410	1.0	356	411	369	1.0	6627447
Soluble pH	pH Units	7.10	N/A	7.06	7.07	6.84	N/A	6627422
Wet Soluble Calcium (Ca)	mg/L	49.6	5.0	50.3	50.1	48.3	5.0	6630839
Saturation %	%	38.8	1.0	39.6	39.6	39.1	1.0	6627416
Wet Soluble Magnesium (Mg)	mg/L	24.3	5.0	30.0	26.3	30.2	5.0	6630839
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	<20	20	6630839
Wet Soluble Sodium (Na)	mg/L	48.7	5.0	55.6	53.4	48.1	5.0	6630839
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	<30	30	6630839
Sodium Adsorption Ratio	N/A	1.42	0.10	1.53	1.52	1.34	0.10	6613278

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
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Your P.O. #: 700250162

Package 1	3.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - the client provided sample ID for FT4333 has been corrected to reflect the COC provided. KD4 - March 12/13

REVISED REPORT - additional TCLP analysis has been completed as per clients' emailed request. KD4 - March 14/13

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6619065	Total Antimony (Sb)	2013/03/05	95	75 - 125	102	75 - 125	<0.10	mg/kg	24.7	30	105	70 - 130
6619065	Total Arsenic (As)	2013/03/05	104	75 - 125	103	75 - 125	0.70, RDL=0.50	mg/kg	0.1	30	99	70 - 130
6619065	Total Barium (Ba)	2013/03/05	NC	75 - 125	104	75 - 125	<0.10	mg/kg	1.5	35	108	70 - 130
6619065	Total Beryllium (Be)	2013/03/05	119	75 - 125	114	75 - 125	<0.40	mg/kg	NC	30		
6619065	Total Cadmium (Cd)	2013/03/05	112	75 - 125	106	75 - 125	<0.050	mg/kg	3.5	30	102	70 - 130
6619065	Total Chromium (Cr)	2013/03/05	102	75 - 125	102	75 - 125	<1.0	mg/kg	2.6	30	98	70 - 130
6619065	Total Cobalt (Co)	2013/03/05	101	75 - 125	103	75 - 125	<0.30	mg/kg	3.5	30	93	70 - 130
6619065	Total Copper (Cu)	2013/03/05	NC	75 - 125	104	75 - 125	<0.50	mg/kg	3.2	30	89	70 - 130
6619065	Total Lead (Pb)	2013/03/05	NC	75 - 125	103	75 - 125	<0.10	mg/kg	1.5	35	101	70 - 130
6619065	Total Lithium (Li)	2013/03/05	107	75 - 125	105	75 - 125	<5.0	mg/kg	NC	30		
6619065	Total Manganese (Mn)	2013/03/05	NC	75 - 125	103	75 - 125	<0.20	mg/kg	2.8	30	101	70 - 130
6619065	Total Mercury (Hg)	2013/03/05	NC	75 - 125	101	75 - 125	<0.050	mg/kg	1.8	35	100	70 - 130
6619065	Total Molybdenum (Mo)	2013/03/05	106	75 - 125	101	75 - 125	<0.10	mg/kg	1.1	35	110	70 - 130
6619065	Total Nickel (Ni)	2013/03/05	102	75 - 125	101	75 - 125	<0.80	mg/kg	5.5	30	89	70 - 130
6619065	Total Selenium (Se)	2013/03/05	118	75 - 125	109	75 - 125	<0.50	mg/kg	NC	30		
6619065	Total Silver (Ag)	2013/03/05	100	75 - 125	97	75 - 125	<0.050	mg/kg	0.01	35		
6619065	Total Strontium (Sr)	2013/03/05	NC	75 - 125	97	75 - 125	<0.10	mg/kg	2.5	35	104	70 - 130
6619065	Total Thallium (Tl)	2013/03/05	98	75 - 125	99	75 - 125	<0.050	mg/kg	4.1	30	91	70 - 130
6619065	Total Tin (Sn)	2013/03/05	102	75 - 125	98	75 - 125	<0.10	mg/kg	1.4	35		
6619065	Total Titanium (Ti)	2013/03/05	NC	75 - 125	98	75 - 125	<1.0	mg/kg	2.2	35	106	70 - 130
6619065	Total Uranium (U)	2013/03/05	99	75 - 125	97	75 - 125	<0.050	mg/kg	1.4	30	93	70 - 130
6619065	Total Vanadium (V)	2013/03/05	99	75 - 125	101	75 - 125	<2.0	mg/kg	2.6	30	104	70 - 130
6619065	Total Zinc (Zn)	2013/03/05	NC	75 - 125	112	75 - 125	<1.0	mg/kg	2.4	30	95	70 - 130
6619065	Total Aluminum (Al)	2013/03/05					<100	mg/kg	2.2	35	105	70 - 130
6619065	Total Calcium (Ca)	2013/03/05					<100	mg/kg	2.3	30	96	70 - 130
6619065	Total Iron (Fe)	2013/03/05					<100	mg/kg	1.6	30	96	70 - 130
6619065	Total Magnesium (Mg)	2013/03/05					<100	mg/kg	0.1	30	94	70 - 130
6619065	Total Phosphorus (P)	2013/03/05					<10	mg/kg	1.4	30	96	70 - 130
6619065	Total Bismuth (Bi)	2013/03/05					<0.10	mg/kg	NC	30		
6619065	Total Potassium (K)	2013/03/05					<100	mg/kg	2.0	35		
6619065	Total Sodium (Na)	2013/03/05					<100	mg/kg	3.7	35		
6619065	Total Zirconium (Zr)	2013/03/05					<0.50	mg/kg	3.0	30		
6619082	Soluble (2:1) pH	2013/03/05			102	96 - 104			0.1	20		
6619121	Total Antimony (Sb)	2013/03/05	98	75 - 125	101	75 - 125	<0.10	mg/kg	NC	30	88	70 - 130
6619121	Total Arsenic (As)	2013/03/05	107	75 - 125	104	75 - 125	0.82, RDL=0.50	mg/kg	2.9	30	100	70 - 130
6619121	Total Barium (Ba)	2013/03/05	NC	75 - 125	104	75 - 125	<0.10	mg/kg	1.5	35	109	70 - 130
6619121	Total Beryllium (Be)	2013/03/05	123	75 - 125	107	75 - 125	<0.40	mg/kg	NC	30		
6619121	Total Cadmium (Cd)	2013/03/05	110	75 - 125	105	75 - 125	<0.050	mg/kg	NC	30	100	70 - 130
6619121	Total Chromium (Cr)	2013/03/05	104	75 - 125	101	75 - 125	<1.0	mg/kg	2.0	30	97	70 - 130

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6619121	Total Cobalt (Co)	2013/03/05	99	75 - 125	102	75 - 125	<0.30	mg/kg	2.0	30	91	70 - 130
6619121	Total Copper (Cu)	2013/03/05	NC	75 - 125	107	75 - 125	<0.50	mg/kg	0.06	30	87	70 - 130
6619121	Total Lead (Pb)	2013/03/05	105	75 - 125	104	75 - 125	<0.10	mg/kg	2.6	35	100	70 - 130
6619121	Total Lithium (Li)	2013/03/05	111	75 - 125	106	75 - 125	<5.0	mg/kg				
6619121	Total Manganese (Mn)	2013/03/05	NC	75 - 125	103	75 - 125	<0.20	mg/kg	2.2	30	100	70 - 130
6619121	Total Mercury (Hg)	2013/03/05	107	75 - 125	102	75 - 125	<0.050	mg/kg			82	70 - 130
6619121	Total Molybdenum (Mo)	2013/03/05	108	75 - 125	103	75 - 125	<0.10	mg/kg	NC	35	109	70 - 130
6619121	Total Nickel (Ni)	2013/03/05	100	75 - 125	102	75 - 125	<0.80	mg/kg	1.2	30	88	70 - 130
6619121	Total Selenium (Se)	2013/03/05	119	75 - 125	109	75 - 125	<0.50	mg/kg	NC	30		
6619121	Total Silver (Ag)	2013/03/05	101	75 - 125	99	75 - 125	<0.050	mg/kg	NC	35		
6619121	Total Strontium (Sr)	2013/03/05	NC	75 - 125	99	75 - 125	<0.10	mg/kg	1.4	35	105	70 - 130
6619121	Total Thallium (Tl)	2013/03/05	98	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	93	70 - 130
6619121	Total Tin (Sn)	2013/03/05	100	75 - 125	99	75 - 125	<0.10	mg/kg	3.0	35		
6619121	Total Titanium (Ti)	2013/03/05	NC	75 - 125	101	75 - 125	<1.0	mg/kg	1.9	35	102	70 - 130
6619121	Total Uranium (U)	2013/03/05	101	75 - 125	98	75 - 125	<0.050	mg/kg			97	70 - 130
6619121	Total Vanadium (V)	2013/03/05	NC	75 - 125	101	75 - 125	<2.0	mg/kg	2.2	30	102	70 - 130
6619121	Total Zinc (Zn)	2013/03/05	NC	75 - 125	114	75 - 125	<1.0	mg/kg	0.8	30	96	70 - 130
6619121	Total Aluminum (Al)	2013/03/05					<100	mg/kg	2.0	35	103	70 - 130
6619121	Total Calcium (Ca)	2013/03/05					<100	mg/kg	2.3	30	96	70 - 130
6619121	Total Iron (Fe)	2013/03/05					<100	mg/kg	1.4	30	95	70 - 130
6619121	Total Magnesium (Mg)	2013/03/05					<100	mg/kg	3.6	30	90	70 - 130
6619121	Total Phosphorus (P)	2013/03/05					<10	mg/kg	1.4	30	94	70 - 130
6619121	Total Bismuth (Bi)	2013/03/05					<0.10	mg/kg	NC	30		
6619121	Total Potassium (K)	2013/03/05					<100	mg/kg	2.5	35		
6619121	Total Sodium (Na)	2013/03/05					<100	mg/kg	NC	35		
6619121	Total Zirconium (Zr)	2013/03/05					<0.50	mg/kg	5.2	30		
6619126	Soluble (2:1) pH	2013/03/05			102	96 - 104			0.3	20		
6619129	Total Antimony (Sb)	2013/03/05	97	75 - 125	102	75 - 125	<0.10	mg/kg	4.5	30	100	70 - 130
6619129	Total Arsenic (As)	2013/03/05	106	75 - 125	103	75 - 125	0.76, RDL=0.50	mg/kg	2.0	30	97	70 - 130
6619129	Total Barium (Ba)	2013/03/05	NC	75 - 125	103	75 - 125	<0.10	mg/kg	2.9	35	106	70 - 130
6619129	Total Beryllium (Be)	2013/03/05	120	75 - 125	106	75 - 125	<0.40	mg/kg	NC	30		
6619129	Total Cadmium (Cd)	2013/03/05	108	75 - 125	106	75 - 125	<0.050	mg/kg	NC	30	101	70 - 130
6619129	Total Chromium (Cr)	2013/03/05	98	75 - 125	100	75 - 125	<1.0	mg/kg	0.7	30	97	70 - 130
6619129	Total Cobalt (Co)	2013/03/05	97	75 - 125	102	75 - 125	<0.30	mg/kg	1.3	30	89	70 - 130
6619129	Total Copper (Cu)	2013/03/05	NC	75 - 125	103	75 - 125	<0.50	mg/kg	1.0	30	87	70 - 130
6619129	Total Lead (Pb)	2013/03/05	102	75 - 125	103	75 - 125	<0.10	mg/kg	0.7	35	99	70 - 130
6619129	Total Lithium (Li)	2013/03/05	109	75 - 125	107	75 - 125	<5.0	mg/kg				
6619129	Total Manganese (Mn)	2013/03/05	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.5	30	101	70 - 130
6619129	Total Mercury (Hg)	2013/03/05	104	75 - 125	105	75 - 125	<0.050	mg/kg			91	70 - 130

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Client Project #: 511828
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Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6619129	Total Molybdenum (Mo)	2013/03/05	107	75 - 125	104	75 - 125	<0.10	mg/kg	0.9	35	115	70 - 130
6619129	Total Nickel (Ni)	2013/03/05	89	75 - 125	99	75 - 125	<0.80	mg/kg	0.7	30	90	70 - 130
6619129	Total Selenium (Se)	2013/03/05	113	75 - 125	112	75 - 125	<0.50	mg/kg	NC	30		
6619129	Total Silver (Ag)	2013/03/05	102	75 - 125	99	75 - 125	<0.050	mg/kg	NC	35		
6619129	Total Strontium (Sr)	2013/03/05	NC	75 - 125	99	75 - 125	<0.10	mg/kg	2.4	35	106	70 - 130
6619129	Total Thallium (Tl)	2013/03/05	96	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	87	70 - 130
6619129	Total Tin (Sn)	2013/03/05	97	75 - 125	100	75 - 125	<0.10	mg/kg	4.4	35		
6619129	Total Titanium (Ti)	2013/03/05	NC	75 - 125	98	75 - 125	<1.0	mg/kg	1.2	35	101	70 - 130
6619129	Total Uranium (U)	2013/03/05	97	75 - 125	95	75 - 125	<0.050	mg/kg			94	70 - 130
6619129	Total Vanadium (V)	2013/03/05	NC	75 - 125	98	75 - 125	<2.0	mg/kg	0.9	30	103	70 - 130
6619129	Total Zinc (Zn)	2013/03/05	NC	75 - 125	113	75 - 125	<1.0	mg/kg	0.6	30	96	70 - 130
6619129	Total Aluminum (Al)	2013/03/05					<100	mg/kg	0.06	35	104	70 - 130
6619129	Total Calcium (Ca)	2013/03/05					<100	mg/kg	2.4	30	94	70 - 130
6619129	Total Iron (Fe)	2013/03/05					<100	mg/kg	1.4	30	93	70 - 130
6619129	Total Magnesium (Mg)	2013/03/05					<100	mg/kg	1.1	30	91	70 - 130
6619129	Total Phosphorus (P)	2013/03/05					<10	mg/kg	1.6	30	95	70 - 130
6619129	Total Bismuth (Bi)	2013/03/05					<0.10	mg/kg	NC	30		
6619129	Total Potassium (K)	2013/03/05					<100	mg/kg	1.6	35		
6619129	Total Sodium (Na)	2013/03/05					<100	mg/kg	NC	35		
6619129	Total Zirconium (Zr)	2013/03/05					<0.50	mg/kg	1.7	30		
6619147	Soluble (2:1) pH	2013/03/05			102	96 - 104			0	20		
6619605	Saturation %	2013/03/05			102	80 - 120	<1.0	%	0.4	30		
6619618	Soluble pH	2013/03/05			101	97 - 103			0.3	20		
6619620	Soluble Conductivity	2013/03/06			105	70 - 130	<1.0	uS/cm	0	35		
6623530	Wet Soluble Calcium (Ca)	2013/03/06					<5.0	mg/L	2.6	30		
6623530	Wet Soluble Magnesium (Mg)	2013/03/06					<5.0	mg/L	NC	30		
6623530	Wet Soluble Potassium (K)	2013/03/06					<20	mg/L	NC	30		
6623530	Wet Soluble Sodium (Na)	2013/03/06					<5.0	mg/L	1.9	30		
6623530	Wet Soluble Sulphur (S)	2013/03/06					<30	mg/L	NC	30		
6625121	Moisture	2013/03/07					<0.30	%	6.1	20		
6625944	Soluble Chloride (Cl)	2013/03/06					<5.0	mg/L	29.0	30		
6625951	Soluble Sulphate (SO4)	2013/03/06					<10	mg/L	NC	30		
6626624	Moisture	2013/03/07					<0.30	%	13.9	20		
6627252	D10-ANTHRACENE (sur.)	2013/03/07	115	60 - 130	99	60 - 130	94	%				
6627252	D8-ACENAPHTHYLENE (sur.)	2013/03/07	80	50 - 130	75	50 - 130	75	%				
6627252	D8-NAPHTHALENE (sur.)	2013/03/07	83	50 - 130	76	50 - 130	76	%				
6627252	TERPHENYL-D14 (sur.)	2013/03/07	96	60 - 130	101	60 - 130	100	%				
6627252	Naphthalene	2013/03/08	114	40 - 130	77	40 - 130	<0.0010	mg/kg	13.1(1)	50		
6627252	2-Methylnaphthalene	2013/03/08	NC	40 - 130	77	40 - 130	<0.0010	mg/kg	0(1)	50		

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6627252	Acenaphthylene	2013/03/08	92	40 - 130	75	40 - 130	<0.00050	mg/kg	37.9(1)	50		
6627252	Acenaphthene	2013/03/08	NC	40 - 130	78	40 - 130	<0.00050	mg/kg	9.7(1)	50		
6627252	Fluorene	2013/03/08	NC	40 - 130	78	40 - 130	<0.0010	mg/kg	12.7(1)	50		
6627252	Phenanthrene	2013/03/08	NC	40 - 130	82	40 - 130	<0.0010	mg/kg	49.4(1)	50		
6627252	Anthracene	2013/03/08	NC	40 - 130	101	40 - 130	<0.0010	mg/kg	15.8(1)	50		
6627252	Fluoranthene	2013/03/08	NC	40 - 130	92	40 - 130	<0.0010	mg/kg	91.9(2, 1)	50		
6627252	Pyrene	2013/03/08	NC	40 - 130	96	40 - 130	<0.0010	mg/kg	89.4(2, 1)	50		
6627252	Benzo(a)anthracene	2013/03/08	NC	40 - 130	72	40 - 130	<0.0010	mg/kg	59.1(2, 1)	50		
6627252	Chrysene	2013/03/08	NC	40 - 130	75	40 - 130	<0.0010	mg/kg	33.5(1)	50		
6627252	Benzo(b&j)fluoranthene	2013/03/08	NC	40 - 130	72	40 - 130	<0.0010	mg/kg	45.4(1)	50		
6627252	Benzo(k)fluoranthene	2013/03/08	NC	40 - 130	82	40 - 130	<0.0010	mg/kg	32.3(1)	50		
6627252	Benzo(a)pyrene	2013/03/08	NC	40 - 130	79	40 - 130	<0.0010	mg/kg	40.0(1)	50		
6627252	Indeno(1,2,3-cd)pyrene	2013/03/08	NC	40 - 130	75	40 - 130	<0.0020	mg/kg	39.9(1)	50		
6627252	Dibenz(a,h)anthracene	2013/03/08	87	40 - 130	74	40 - 130	<0.00050	mg/kg	37.0(1)	50		
6627252	Benzo(g,h,i)perylene	2013/03/08	NC	40 - 130	72	40 - 130	<0.0020	mg/kg	33.1(1)	50		
6627416	Saturation %	2013/03/07			104	80 - 120	<1.0	%	0.2	30		
6627422	Soluble pH	2013/03/07			100	97 - 103			0.6	20		
6627447	Soluble Conductivity	2013/03/11			96	70 - 130	<1.0	uS/cm	9.7	35		
6630839	Wet Soluble Calcium (Ca)	2013/03/07					<5.0	mg/L	7.1	30		
6630839	Wet Soluble Magnesium (Mg)	2013/03/07					<5.0	mg/L	22.7	30		
6630839	Wet Soluble Potassium (K)	2013/03/07					<20	mg/L	NC	30		
6630839	Wet Soluble Sodium (Na)	2013/03/07					<5.0	mg/L	17.0	30		
6630839	Wet Soluble Sulphur (S)	2013/03/07					<30	mg/L	NC	30		
6632144	Soluble Chloride (Cl)	2013/03/08					<5.0	mg/L	16.9	30		
6632146	Soluble Sulphate (SO4)	2013/03/08					<10	mg/L	0.1	30		
6633894	D10-ANTHRACENE (sur.)	2013/03/09	95	60 - 130	74	60 - 130	78	%				
6633894	D8-ACENAPHTHYLENE (sur.)	2013/03/09	66	50 - 130	77	50 - 130	78	%				
6633894	D8-NAPHTHALENE (sur.)	2013/03/09	67	50 - 130	77	50 - 130	79	%				
6633894	TERPHENYL-D14 (sur.)	2013/03/09	71	60 - 130	86	60 - 130	91	%				
6633894	Naphthalene	2013/03/09	71	40 - 130	82	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	2-Methylnaphthalene	2013/03/09	72	40 - 130	83	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	Acenaphthylene	2013/03/09	73	40 - 130	82	40 - 130	<0.00050	mg/kg	NC(1)	50		
6633894	Acenaphthene	2013/03/09	73	40 - 130	85	40 - 130	<0.00050	mg/kg	42.3(1)	50		
6633894	Fluorene	2013/03/09	71	40 - 130	85	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	Phenanthrene	2013/03/09	NC	40 - 130	79	40 - 130	<0.0010	mg/kg	64.2(2, 1)	50		
6633894	Anthracene	2013/03/09	73	40 - 130	89	40 - 130	<0.0010	mg/kg	65.6(2, 1)	50		
6633894	Fluoranthene	2013/03/09	NC	40 - 130	87	40 - 130	0.0011, RDL=0.0010	mg/kg	65.2(2, 1)	50		
6633894	Pyrene	2013/03/09	NC	40 - 130	88	40 - 130	<0.0010	mg/kg	57.9(2, 1)	50		
6633894	Benzo(a)anthracene	2013/03/09	54	40 - 130	82	40 - 130	<0.0010	mg/kg	57.3(2, 1)	50		

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Maxxam Job #: B316601
Report Date: 2013/03/14

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6633894	Chrysene	2013/03/09	54	40 - 130	83	40 - 130	<0.0010	mg/kg	48.0(1)	50		
6633894	Benzo(b&j)fluoranthene	2013/03/09	NC	40 - 130	87	40 - 130	0.0010, RDL=0.0010	mg/kg	48.2(1)	50		
6633894	Benzo(k)fluoranthene	2013/03/09	67	40 - 130	85	40 - 130	<0.0010	mg/kg	52.6(2, 1)	50		
6633894	Benzo(a)pyrene	2013/03/09	62	40 - 130	88	40 - 130	<0.0010	mg/kg	50.0(1)	50		
6633894	Indeno(1,2,3-cd)pyrene	2013/03/09	68	40 - 130	86	40 - 130	<0.0020	mg/kg	NC(1)	50		
6633894	Dibenz(a,h)anthracene	2013/03/09	75	40 - 130	85	40 - 130	<0.00050	mg/kg	NC(1)	50		
6633894	Benzo(g,h,i)perylene	2013/03/09	64	40 - 130	83	40 - 130	<0.0020	mg/kg	NC(1)	50		
6646952	Initial pH of Sample	2013/03/14					4.90, RDL=N/A	pH Units	0.7	20		
6646952	Final pH of Leachate	2013/03/14					4.90, RDL=N/A	pH Units	1.2	20		
6646952	pH of Leaching Fluid	2013/03/14					4.90, RDL=N/A	pH Units	0	20		
6646952	pH after HCl	2013/03/14							2.0	20		
6650584	LEACHATE Arsenic (As)	2013/03/14	103	75 - 125	104	75 - 125	<0.10	mg/L				
6650584	LEACHATE Copper (Cu)	2013/03/14	95	75 - 125	98	75 - 125	<0.10	mg/L	NC	35		
6650584	LEACHATE Lead (Pb)	2013/03/14	95	75 - 125	94	75 - 125	<0.10	mg/L				

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample dilution.
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B316601	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #: C#353268-04-01	PROJECT MANAGER: Kim Dominic
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT4311	SP13-36-130228	13/02/28		Soil		X	X						X				
2	FT4312	SP13-35-130228					X	X						X				
3	FT4313	SP13-34-130228					X	X						X				
4	FT4314	SP13-33-130228					X	X						X				
5	FT4315	SP13-32-~~02~~130228					X	X						X				
6	FT4316	SP13-37-130301	13/03/01				X	X						X				B316601
7	FT4317	SP1338-130301					X	X						X				
8	FT4318	SP13-39-130301					X	X						X				
9	FT4319	SP13-40-130301					X	X						X				
10	FT4320	SP13-40-01-130301					X	X						X				

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Shawn Batten	13/03/01	16:00	Nahed Amer	13/03/02	09:45		[ ]	3,4,2	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free (800) 665 8566 Fax:(604) 639 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6850	Phone:	(250)385-5028 Fax: (250)385-5038	Project Name:		0#353268-05-01	Kim Dominic
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC		
				Sampled By:			

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (+ 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT4321	SP13-41-130301	13/03/01		Soil		X	X						X			2	
2	FT4322	SP13-42-130301					X	X						X			2	
3	FT4323	SP13-43-130301					X	X						X			2	
4	FT4324	SP13-44-130301					X	X						X			2	
5	FT4325	SP13-45-130301					X	X						X			2	
6	FT4326	SP13-46-130301					X	X						X			2	B316601
7	FT4327	SP13-47-130301					X	X						X			2	
8	FT4328	SP13-48-130301					X	X						X			2	
9	FT4329	SP13-49-130301					X	X						X			2	
10	FT4330	SP13-50-130301					X	X						X			2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Shawn Butters	13/03/01	16:00	Naheed Amer	13/03/02	09:45		[ ]	3.4.2	[X] Yes [ ] No

*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 363208
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828		
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC	C#353268-03-01	Kim Domino
				Sampled By:			

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT4332	SP13-50-01-130301	13/03/01		Soil		X	X						X			2	
2	FT4333	SP13-51-130301	↓		↓		X	X						X			2	
3																		
4																		
5																		
6																		
7																		B316601
8																		
9																		
10																		

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS!

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Shawn Bottesi	13/03/01	16:00	Naked Amer	13/03/02	09:45		[ ]	3,4,2	[✓] Yes [ ] No

*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your C.O.C. #: 35326807, 35326808

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/18
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B317135
Received: 2013/03/05, 08:00

Sample Matrix: Soil
Samples Received: 17

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	7	2013/03/08	2013/03/08	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	10	2013/03/11	2013/03/12	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	7	2013/03/08	2013/03/11	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	10	2013/03/11	2013/03/12	BBY6SOP-00029	SM-2510 B
Elements by ICPMS (total)	17	2013/03/06	2013/03/06	BBY7SOP-00001	EPA 6020A
Metals - TCLP	1	2013/03/14	2013/03/15	BBY7SOP-00001	EPA 6020A
Moisture	11	N/A	2013/03/09	BBY8SOP-00017	Ont MOE -E 3139
Moisture	6	N/A	2013/03/11	BBY8SOP-00017	Ont MOE -E 3139
Benzo[a]pyrene Equivalency	1	N/A	2013/03/11	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	16	N/A	2013/03/12	BBY WI-00033	CCME Guidelines
PAH in Soil by GC/MS Lowlevel (Extended)	1	2013/03/08	2013/03/09	BRN SOP-00332 R5.0	EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	4	2013/03/08	2013/03/11	BRN SOP-00332 R5.0	EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	6	2013/03/08	2013/03/12	BRN SOP-00332 R5.0	EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	6	2013/03/09	2013/03/11	BRN SOP-00332 R5.0	EPA 8270D
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/11	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	16	N/A	2013/03/12	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	17	2013/03/06	2013/03/06	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	7	2013/03/08	2013/03/08	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	10	2013/03/11	2013/03/11	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	1	N/A	2013/03/15	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	17	N/A	2013/03/06		
Saturated Paste	7	2013/03/08	2013/03/08	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	10	2013/03/11	2013/03/11	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	7	N/A	2013/03/11		
Soluble Ions Na, Cl	10	N/A	2013/03/12		
Sulphate (soluble) (soil)	7	2013/03/08	2013/03/08	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	10	2013/03/11	2013/03/12	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	7	N/A	2013/03/11	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	10	N/A	2013/03/12	BBY7SOP-00002	EPA 6020A

* Results relate only to the items tested.

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FT8361	FT8362	FT8363	FT8364		FT8365	FT8366		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04		2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**SP13-53-130304**	**SP13-54-130304**	**SP13-55-130304**	**QC Batch**	**SP13-56-130304**	**SP13-57-130304**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	19	16	16	17	6628897	16	19	0.30	6632431

Maxxam ID		FT8367	FT8368	FT8369	FT8370		FT8393	FT8394		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04		2013/03/04	2013/03/04		
	UNITS	**SP13-58-130304**	**SP13-59-130304**	**SP13-60-130304**	**SP13-60-01-130304**	**QC Batch**	**SP13-61-130304**	**SP13-62-130304**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	16	15	12	15	6632431	18	15	0.30	6630948

Maxxam ID		FT8395	FT8396	FT8397		FT8398	FT8398	FT8399		
Sampling Date		2013/03/04	2013/03/04	2013/03/04		2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-63-130304**	**SP13-64-130304**	**SP13-65-130304**	**QC Batch**	**SP13-66-130304**	**SP13-66-130304 Lab-Dup**	**SP13-67-130304**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	15	17	17	6630948	16	17	18	0.30	6630952

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FT8361	FT8361		
Sampling Date		2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**SP13-52-130304 Lab-Dup**	**RDL**	**QC Batch**
TCLP Extraction Procedure					
Initial pH of Sample	pH Units	9.36	9.38	N/A	6650658
pH after HCl	pH Units	2.01	2.06	N/A	6650658
Final pH of Leachate	pH Units	5.17	5.12	N/A	6650658
pH of Leaching Fluid	pH Units	4.90	4.90	N/A	6650658

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT8361	FT8362	FT8363	FT8364	FT8365	FT8366		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**SP13-53-130304**	**SP13-54-130304**	**SP13-55-130304**	**SP13-56-130304**	**SP13-57-130304**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.58	7.47	7.57	7.61	7.62	7.45	0.010	6623474
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20000	21100	21200	20000	21000	21300	100	6623469
Total Antimony (Sb)	mg/kg	57.6	42.0	37.6	36.1	49.1	30.7	0.10	6623469
Total Arsenic (As)	mg/kg	123	88.0	80.6	67.0	109	68.3	0.50	6623469
Total Barium (Ba)	mg/kg	117	105	104	94.6	106	106	0.10	6623469
Total Beryllium (Be)	mg/kg	0.43	0.45	0.41	<0.40	0.40	<0.40	0.40	6623469
Total Bismuth (Bi)	mg/kg	0.28	0.20	0.31	0.20	0.34	0.39	0.10	6623469
Total Cadmium (Cd)	mg/kg	0.446	0.427	0.541	0.449	0.498	0.429	0.050	6623469
Total Calcium (Ca)	mg/kg	10100	9060	11600	9860	8750	7420	100	6623469
Total Chromium (Cr)	mg/kg	35.8	40.8	41.9	39.5	40.3	35.6	1.0	6623469
Total Cobalt (Co)	mg/kg	16.3	15.5	15.4	14.2	20.4	13.8	0.30	6623469
Total Copper (Cu)	mg/kg	141	154	133	135	158	120	0.50	6623469
Total Iron (Fe)	mg/kg	31000	30500	31300	29400	31600	29100	100	6623469
Total Lead (Pb)	mg/kg	120	98.3	86.6	78.3	111	84.3	0.10	6623469
Total Lithium (Li)	mg/kg	11.6	12.7	12.3	11.4	12.4	12.1	5.0	6623469
Total Magnesium (Mg)	mg/kg	6700	7290	7490	6900	7230	6640	100	6623469
Total Manganese (Mn)	mg/kg	516	567	551	533	497	541	0.20	6623469
Total Mercury (Hg)	mg/kg	0.290	0.765	0.188	0.245	0.232	0.183	0.050	6623469
Total Molybdenum (Mo)	mg/kg	5.14	4.44	4.90	4.06	7.86	3.75	0.10	6623469
Total Nickel (Ni)	mg/kg	28.8	28.7	32.1	28.2	31.1	28.7	0.80	6623469
Total Phosphorus (P)	mg/kg	636	648	647	640	679	636	10	6623469
Total Potassium (K)	mg/kg	737	741	733	705	772	736	100	6623469
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6623469
Total Silver (Ag)	mg/kg	0.171	0.149	0.163	0.137	0.185	0.156	0.050	6623469
Total Sodium (Na)	mg/kg	390	318	369	277	342	228	100	6623469
Total Strontium (Sr)	mg/kg	66.6	54.6	77.6	62.3	51.1	44.4	0.10	6623469
Total Thallium (Tl)	mg/kg	0.095	0.095	0.098	0.077	0.092	0.098	0.050	6623469
Total Tin (Sn)	mg/kg	9.67	6.39	7.25	5.61	7.29	5.97	0.10	6623469
Total Titanium (Ti)	mg/kg	917	931	1020	1030	983	1020	1.0	6623469
Total Uranium (U)	mg/kg	0.683	0.695	0.680	0.655	0.796	0.768	0.050	6623469
Total Vanadium (V)	mg/kg	66.8	73.1	74.6	73.7	75.0	72.3	2.0	6623469
Total Zinc (Zn)	mg/kg	583	467	488	408	504	411	1.0	6623469
Total Zirconium (Zr)	mg/kg	3.20	3.35	3.75	3.35	3.44	3.17	0.50	6623469

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT8367	FT8368	FT8369	FT8370	FT8393	FT8394		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-58-130304**	**SP13-59-130304**	**SP13-60-130304**	**SP13-60-01-130304**	**SP13-61-130304**	**SP13-62-130304**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.41	7.77	7.70	7.73	7.76	7.78	0.010	6623474
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21700	19800	20600	18800	21100	19900	100	6623469
Total Antimony (Sb)	mg/kg	32.5	37.3	23.0	44.3	33.8	42.5	0.10	6623469
Total Arsenic (As)	mg/kg	59.3	67.8	48.7	86.2	68.8	87.3	0.50	6623469
Total Barium (Ba)	mg/kg	102	101	104	97.8	112	109	0.10	6623469
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	0.43	<0.40	0.40	6623469
Total Bismuth (Bi)	mg/kg	0.22	0.21	0.17	0.24	0.24	0.31	0.10	6623469
Total Cadmium (Cd)	mg/kg	0.401	0.470	0.331	0.527	0.504	0.539	0.050	6623469
Total Calcium (Ca)	mg/kg	7710	8330	7880	8460	9410	9810	100	6623469
Total Chromium (Cr)	mg/kg	36.6	47.5	40.9	41.0	44.7	43.7	1.0	6623469
Total Cobalt (Co)	mg/kg	13.2	15.2	13.4	15.3	14.7	16.7	0.30	6623469
Total Copper (Cu)	mg/kg	107	142	156	167	173	414	0.50	6623469
Total Iron (Fe)	mg/kg	30000	29000	29700	30800	30000	31200	100	6623469
Total Lead (Pb)	mg/kg	85.4	93.5	120	99.1	129	111	0.10	6623469
Total Lithium (Li)	mg/kg	12.5	12.0	11.6	11.0	12.4	11.9	5.0	6623469
Total Magnesium (Mg)	mg/kg	6790	7450	6830	7170	6850	6970	100	6623469
Total Manganese (Mn)	mg/kg	557	532	547	691	541	528	0.20	6623469
Total Mercury (Hg)	mg/kg	0.166	0.219	0.347	0.337	0.289	0.412	0.050	6623469
Total Molybdenum (Mo)	mg/kg	3.75	6.14	3.69	5.65	4.83	6.55	0.10	6623469
Total Nickel (Ni)	mg/kg	30.2	32.8	31.1	30.1	29.8	31.6	0.80	6623469
Total Phosphorus (P)	mg/kg	630	758	605	641	914	679	10	6623469
Total Potassium (K)	mg/kg	728	699	690	653	767	744	100	6623469
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6623469
Total Silver (Ag)	mg/kg	0.126	0.148	0.118	0.376	0.160	0.207	0.050	6623469
Total Sodium (Na)	mg/kg	254	308	304	309	322	319	100	6623469
Total Strontium (Sr)	mg/kg	47.1	52.0	49.4	48.1	63.6	58.6	0.10	6623469
Total Thallium (Tl)	mg/kg	0.080	0.080	0.073	0.092	0.088	0.090	0.050	6623469
Total Tin (Sn)	mg/kg	5.83	9.58	5.08	7.82	7.16	9.78	0.10	6623469
Total Titanium (Ti)	mg/kg	933	810	940	1040	917	1060	1.0	6623469
Total Uranium (U)	mg/kg	0.636	0.651	0.693	0.601	0.865	0.794	0.050	6623469
Total Vanadium (V)	mg/kg	71.7	67.9	75.6	69.2	70.8	71.5	2.0	6623469
Total Zinc (Zn)	mg/kg	365	424	368	464	513	539	1.0	6623469
Total Zirconium (Zr)	mg/kg	3.07	2.59	3.20	3.34	2.72	3.26	0.50	6623469

RDL = Reportable Detection Limit

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FT8395	FT8396	FT8397	FT8398	FT8399		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-63-130304**	**SP13-64-130304**	**SP13-65-130304**	**SP13-66-130304**	**SP13-67-130304**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.48	7.59	7.61	7.62	7.63	0.010	6623474
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	19000	19400	19300	19800	20400	100	6623469
Total Antimony (Sb)	mg/kg	29.9	41.6	39.1	43.5	33.4	0.10	6623469
Total Arsenic (As)	mg/kg	55.9	100	77.9	98.5	81.2	0.50	6623469
Total Barium (Ba)	mg/kg	97.7	106	106	112	103	0.10	6623469
Total Beryllium (Be)	mg/kg	<0.40	0.40	<0.40	<0.40	0.42	0.40	6623469
Total Bismuth (Bi)	mg/kg	0.21	0.26	0.30	0.34	0.34	0.10	6623469
Total Cadmium (Cd)	mg/kg	0.809	0.538	0.469	0.607	0.636	0.050	6623469
Total Calcium (Ca)	mg/kg	8070	9980	8730	8020	9220	100	6623469
Total Chromium (Cr)	mg/kg	52.0	41.1	38.0	40.2	37.4	1.0	6623469
Total Cobalt (Co)	mg/kg	13.6	16.6	14.2	15.0	14.3	0.30	6623469
Total Copper (Cu)	mg/kg	159	167	150	191	157	0.50	6623469
Total Iron (Fe)	mg/kg	27600	31500	30400	29100	31200	100	6623469
Total Lead (Pb)	mg/kg	90.7	117	101	130	118	0.10	6623469
Total Lithium (Li)	mg/kg	11.3	11.2	11.0	11.7	12.4	5.0	6623469
Total Magnesium (Mg)	mg/kg	7090	7390	6480	6570	7040	100	6623469
Total Manganese (Mn)	mg/kg	487	578	696	514	587	0.20	6623469
Total Mercury (Hg)	mg/kg	0.275	0.211	0.287	0.248	0.264	0.050	6623469
Total Molybdenum (Mo)	mg/kg	3.42	4.47	4.75	4.93	4.77	0.10	6623469
Total Nickel (Ni)	mg/kg	34.0	28.5	28.2	31.4	29.7	0.80	6623469
Total Phosphorus (P)	mg/kg	630	616	627	628	628	10	6623469
Total Potassium (K)	mg/kg	650	763	694	706	764	100	6623469
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6623469
Total Silver (Ag)	mg/kg	0.210	0.176	0.155	0.186	0.157	0.050	6623469
Total Sodium (Na)	mg/kg	299	361	289	328	284	100	6623469
Total Strontium (Sr)	mg/kg	46.8	56.6	52.0	49.7	62.9	0.10	6623469
Total Thallium (Tl)	mg/kg	0.075	0.111	0.087	0.082	0.093	0.050	6623469
Total Tin (Sn)	mg/kg	6.19	9.40	8.03	8.83	9.81	0.10	6623469
Total Titanium (Ti)	mg/kg	951	839	850	866	961	1.0	6623469
Total Uranium (U)	mg/kg	0.588	0.653	0.726	0.817	0.878	0.050	6623469
Total Vanadium (V)	mg/kg	66.6	68.2	66.3	70.0	72.2	2.0	6623469
Total Zinc (Zn)	mg/kg	426	588	499	592	591	1.0	6623469
Total Zirconium (Zr)	mg/kg	3.18	3.38	2.67	2.62	3.14	0.50	6623469

RDL = Reportable Detection Limit

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

TCLP METALS (SOIL)

Maxxam ID		FT8361	FT8361		
Sampling Date		2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**SP13-52-130304 Lab-Dup**	**RDL**	**QC Batch**
Metals					
LEACHATE Arsenic (As)	mg/L	<0.10	<0.10	0.10	6654094

RDL = Reportable Detection Limit

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SOIL)

Maxxam ID		FT8361	FT8362	FT8363	FT8364	FT8365	FT8366		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**SP13-53-130304**	**SP13-54-130304**	**SP13-55-130304**	**SP13-56-130304**	**SP13-57-130304**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	2.5	2.5	2.7	1.9	2.7	2.4	0.10	6619733
Benzo[a]pyrene equivalency	N/A	0.20	0.22	0.23	0.16	0.23	0.20	0.10	6619733
Polycyclic Aromatics									
Naphthalene	mg/kg	0.034(1)	0.035(1)	0.051(1)	0.035(1)	0.084(1)	0.027(1)	0.010	6639687
2-Methylnaphthalene	mg/kg	0.027(1)	0.027(1)	0.043(1)	0.023(1)	0.049(1)	0.020(1)	0.010	6639687
Acenaphthylene	mg/kg	0.028(1)	0.031(1)	0.027(1)	0.022(1)	0.035(1)	0.017(1)	0.0050	6639687
Acenaphthene	mg/kg	0.033(1)	0.029(1)	0.030(1)	0.027(1)	0.052(1)	0.034(1)	0.0050	6639687
Fluorene	mg/kg	0.044(1)	0.034(1)	0.032(1)	0.031(1)	0.064(1)	0.034(1)	0.010	6639687
Phenanthrene	mg/kg	0.27(1)	0.17(1)	0.19(1)	0.15(1)	0.29(1)	0.21(1)	0.010	6639687
Anthracene	mg/kg	0.059(1)	0.048(1)	0.059(1)	0.040(1)	0.081(1)	0.053(1)	0.010	6639687
Fluoranthene	mg/kg	0.33(1)	0.27(1)	0.31(1)	0.23(1)	0.34(1)	0.29(1)	0.010	6639687
Pyrene	mg/kg	0.28(1)	0.28(1)	0.29(1)	0.25(1)	0.31(1)	0.26(1)	0.010	6639687
Benzo(a)anthracene	mg/kg	0.12(1)	0.12(1)	0.13(1)	0.094(1)	0.14(1)	0.13(1)	0.010	6639687
Chrysene	mg/kg	0.15(1)	0.15(1)	0.16(1)	0.11(1)	0.16(1)	0.14(1)	0.010	6639687
Benzo(b&j)fluoranthene	mg/kg	0.19(1)	0.18(1)	0.19(1)	0.14(1)	0.20(1)	0.18(1)	0.010	6639687
Benzo(k)fluoranthene	mg/kg	0.059(1)	0.063(1)	0.070(1)	0.049(1)	0.066(1)	0.061(1)	0.010	6639687
Benzo(a)pyrene	mg/kg	0.14(1)	0.15(1)	0.16(1)	0.10(1)	0.16(1)	0.14(1)	0.010	6639687
Indeno(1,2,3-cd)pyrene	mg/kg	0.082(1)	0.097(1)	0.097(1)	0.068(1)	0.098(1)	0.086(1)	0.020	6639687
Dibenz(a,h)anthracene	mg/kg	0.020(1)	0.023(1)	0.022(1)	0.018(1)	0.019(1)	0.017(1)	0.0050	6639687
Benzo(g,h,i)perylene	mg/kg	0.093(1)	0.11(1)	0.11(1)	0.075(1)	0.11(1)	0.093(1)	0.020	6639687
Low Molecular Weight PAH`s	mg/kg	0.50	0.37	0.43	0.33	0.65	0.40	0.010	6619734
High Molecular Weight PAH`s	mg/kg	1.4	1.6	1.7	1.2	1.7	1.5	0.020	6619734
Total PAH	mg/kg	1.9	1.9	2.1	1.6	2.4	1.9	0.020	6619734
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	75	74	74	76	74	73		6639687
D8-ACENAPHTHYLENE (sur.)	%	65	69	70	71	69	68		6639687
D8-NAPHTHALENE (sur.)	%	66	69	70	71	70	68		6639687
TERPHENYL-D14 (sur.)	%	74	75	76	77	75	74		6639687

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SOIL)

Maxxam ID		FT8367	FT8368	FT8368	FT8369	FT8370	FT8393		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-58-130304**	**SP13-59-130304**	**SP13-59-130304 Lab-Dup**	**SP13-60-130304**	**SP13-60-01-130304**	**SP13-61-130304**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	3.2	4.5		3.3	2.0	2.5	0.10	6619733
Benzo[a]pyrene equivalency	N/A	0.27	0.40		0.28	0.17	0.21	0.10	6619733
Polycyclic Aromatics									
Naphthalene	mg/kg	0.050(1)	0.027(1)	0.019(1)	0.075(1)	0.032(1)	0.043(1)	0.010	6639687
2-Methylnaphthalene	mg/kg	0.051(1)	0.042(1)	0.022(1)	0.058(1)	0.027(1)	0.035(1)	0.010	6639687
Acenaphthylene	mg/kg	0.039(1)	0.023(1)	0.030(1)	0.030(1)	0.023(1)	0.025(1)	0.0050	6639687
Acenaphthene	mg/kg	0.027(1)	0.064(2)	0.027(1)	0.050(1)	0.029(1)	0.036(1)	0.0050	6639687
Fluorene	mg/kg	0.036(1)	0.065(2)	0.030(1)	0.063(1)	0.033(1)	0.042(1)	0.010	6639687
Phenanthrene	mg/kg	0.23(1)	0.38(2)	0.23(1)	0.34(1)	0.17(1)	0.21(1)	0.010	6639687
Anthracene	mg/kg	0.067(1)	0.11(1)	0.070(1)	0.098(1)	0.048(1)	0.056(1)	0.010	6639687
Fluoranthene	mg/kg	0.41(1)	0.45(1)	0.34(1)	0.40(1)	0.23(1)	0.28(1)	0.010	6639687
Pyrene	mg/kg	0.37(1)	0.41(1)	0.30(1)	0.38(1)	0.22(1)	0.27(1)	0.010	6639687
Benzo(a)anthracene	mg/kg	0.16(1)	0.22(1)	0.15(1)	0.18(1)	0.10(1)	0.13(1)	0.010	6639687
Chrysene	mg/kg	0.20(1)	0.24(1)	0.17(1)	0.21(1)	0.12(1)	0.15(1)	0.010	6639687
Benzo(b&j)fluoranthene	mg/kg	0.23(1)	0.33(1)	0.21(1)	0.23(1)	0.15(1)	0.18(1)	0.010	6639687
Benzo(k)fluoranthene	mg/kg	0.084(1)	0.11(1)	0.072(1)	0.080(1)	0.048(1)	0.062(1)	0.010	6639687
Benzo(a)pyrene	mg/kg	0.18(1)	0.27(1)	0.16(1)	0.19(1)	0.12(1)	0.14(1)	0.010	6639687
Indeno(1,2,3-cd)pyrene	mg/kg	0.11(1)	0.18(2)	0.10(1)	0.11(1)	0.072(1)	0.086(1)	0.020	6639687
Dibenz(a,h)anthracene	mg/kg	0.025(1)	0.037(1)	0.024(1)	0.028(1)	0.014(1)	0.016(1)	0.0050	6639687
Benzo(g,h,i)perylene	mg/kg	0.11(1)	0.19(2)	0.11(1)	0.12(1)	0.079(1)	0.093(1)	0.020	6639687
Low Molecular Weight PAH`s	mg/kg	0.50	0.71		0.72	0.37	0.45	0.010	6619734
High Molecular Weight PAH`s	mg/kg	2.0	2.6		2.1	1.2	1.5	0.020	6619734
Total PAH	mg/kg	2.5	3.3		2.8	1.6	2.0	0.020	6619734
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	76	74	73	76	76	76		6639687
D8-ACENAPHTHYLENE (sur.)	%	70	68	68	71	71	70		6639687
D8-NAPHTHALENE (sur.)	%	71	69	68	71	71	71		6639687
TERPHENYL-D14 (sur.)	%	76	75	74	76	76	77		6639687

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.
(2) - RDL raised due to sample dilution.
Duplicate exceeds acceptance criteria due to sample matrix

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SOIL)

Maxxam ID		FT8394	FT8394		FT8395		
Sampling Date		2013/03/04	2013/03/04		2013/03/04		
	UNITS	**SP13-62-130304**	**SP13-62-130304 Lab-Dup**	**QC Batch**	**SP13-63-130304**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	3.8		6619733	7.2	0.10	6619733
Benzo[a]pyrene equivalency	N/A	0.32		6619733	0.65	0.10	6619733
Polycyclic Aromatics							
Naphthalene	mg/kg	0.052(1)	0.035(1)	6633894	0.055(1)	0.010	6639687
2-Methylnaphthalene	mg/kg	0.038(1)	0.029(1)	6633894	0.040(1)	0.010	6639687
Acenaphthylene	mg/kg	0.029(1)	0.022(1)	6633894	0.032(1)	0.0050	6639687
Acenaphthene	mg/kg	0.042(1)	0.027(1)	6633894	0.062(1)	0.0050	6639687
Fluorene	mg/kg	0.049(1)	0.030(1)	6633894	0.058(1)	0.010	6639687
Phenanthrene	mg/kg	0.29(2)	0.15(1)	6633894	0.46(1)	0.010	6639687
Anthracene	mg/kg	0.11(2)	0.054(1)	6633894	0.12(1)	0.010	6639687
Fluoranthene	mg/kg	0.50(2)	0.25(1)	6633894	0.63(1)	0.010	6639687
Pyrene	mg/kg	0.46(2)	0.25(1)	6633894	0.58(1)	0.010	6639687
Benzo(a)anthracene	mg/kg	0.20(2)	0.11(1)	6633894	0.33(1)	0.010	6639687
Chrysene	mg/kg	0.22(1)	0.13(1)	6633894	0.35(1)	0.010	6639687
Benzo(b&j)fluoranthene	mg/kg	0.28(1)	0.17(1)	6633894	0.52(1)	0.010	6639687
Benzo(k)fluoranthene	mg/kg	0.093(2)	0.054(1)	6633894	0.18(1)	0.010	6639687
Benzo(a)pyrene	mg/kg	0.21(1)	0.13(1)	6633894	0.43(1)	0.010	6639687
Indeno(1,2,3-cd)pyrene	mg/kg	0.12(1)	0.078(1)	6633894	0.27(1)	0.020	6639687
Dibenz(a,h)anthracene	mg/kg	0.034(1)	0.021(1)	6633894	0.082(1)	0.0050	6639687
Benzo(g,h,i)perylene	mg/kg	0.13(1)	0.086(1)	6633894	0.30(1)	0.020	6639687
Low Molecular Weight PAH`s	mg/kg	0.61		6619734	0.82	0.010	6619734
High Molecular Weight PAH`s	mg/kg	2.4		6619734	4.0	0.020	6619734
Total PAH	mg/kg	3.0		6619734	4.8	0.020	6619734
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	89	95	6633894	74		6639687
D8-ACENAPHTHYLENE (sur.)	%	69	66	6633894	69		6639687
D8-NAPHTHALENE (sur.)	%	70	67	6633894	69		6639687
TERPHENYL-D14 (sur.)	%	77	75	6633894	75		6639687

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.
(2) - RDL raised due to sample dilution. Duplicate RPD above control limit - Increased variability of results.

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

CCME PAH IN SEDIMENTS BY GC-MS (SOIL)

Maxxam ID		FT8396	FT8397	FT8398	FT8399		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-64-130304**	**SP13-65-130304**	**SP13-66-130304**	**SP13-67-130304**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	6.5	2.7	2.3	2.6	0.10	6619733
Benzo[a]pyrene equivalency	N/A	0.54	0.23	0.19	0.22	0.10	6619733
Polycyclic Aromatics							
Naphthalene	mg/kg	0.095(1)	0.045(1)	0.061(1)	0.042(1)	0.010	6639687
2-Methylnaphthalene	mg/kg	0.067(1)	0.042(1)	0.033(1)	0.040(1)	0.010	6639687
Acenaphthylene	mg/kg	0.042(1)	0.029(1)	0.027(1)	0.028(1)	0.0050	6639687
Acenaphthene	mg/kg	0.096(1)	0.031(1)	0.028(1)	0.025(1)	0.0050	6639687
Fluorene	mg/kg	0.13(1)	0.038(1)	0.030(1)	0.028(1)	0.010	6639687
Phenanthrene	mg/kg	0.91(1)	0.22(1)	0.15(1)	0.15(1)	0.010	6639687
Anthracene	mg/kg	0.22(1)	0.054(1)	0.042(1)	0.045(1)	0.010	6639687
Fluoranthene	mg/kg	0.96(1)	0.33(1)	0.25(1)	0.26(1)	0.010	6639687
Pyrene	mg/kg	0.81(1)	0.30(1)	0.23(1)	0.26(1)	0.010	6639687
Benzo(a)anthracene	mg/kg	0.37(1)	0.14(1)	0.11(1)	0.12(1)	0.010	6639687
Chrysene	mg/kg	0.41(1)	0.16(1)	0.14(1)	0.15(1)	0.010	6639687
Benzo(b&j)fluoranthene	mg/kg	0.46(1)	0.20(1)	0.18(1)	0.20(1)	0.010	6639687
Benzo(k)fluoranthene	mg/kg	0.16(1)	0.070(1)	0.057(1)	0.061(1)	0.010	6639687
Benzo(a)pyrene	mg/kg	0.37(1)	0.16(1)	0.13(1)	0.15(1)	0.010	6639687
Indeno(1,2,3-cd)pyrene	mg/kg	0.21(1)	0.096(1)	0.082(1)	0.094(1)	0.020	6639687
Dibenz(a,h)anthracene	mg/kg	0.051(1)	0.018(1)	0.019(1)	0.023(1)	0.0050	6639687
Benzo(g,h,i)perylene	mg/kg	0.21(1)	0.10(1)	0.087(1)	0.10(1)	0.020	6639687
Low Molecular Weight PAH`s	mg/kg	1.6	0.46	0.38	0.36	0.010	6619734
High Molecular Weight PAH`s	mg/kg	4.3	1.7	1.4	1.5	0.020	6619734
Total PAH	mg/kg	5.9	2.2	1.8	1.9	0.020	6619734
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	75	71	76	74		6639687
D8-ACENAPHTHYLENE (sur.)	%	71	66	72	69		6639687
D8-NAPHTHALENE (sur.)	%	71	66	72	69		6639687
TERPHENYL-D14 (sur.)	%	76	72	78	76		6639687

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT8361		FT8362	FT8363	FT8364		FT8365	FT8365		
Sampling Date		2013/03/04		2013/03/04	2013/03/04	2013/03/04		2013/03/04	2013/03/04		
	UNITS	**SP13-52-130304**	**RDL**	**SP13-53-130304**	**SP13-54-130304**	**SP13-55-130304**	**RDL**	**SP13-56-130304**	**SP13-56-130304 Lab-Dup**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	68	10	42	53	66	10	50	46	10	6634728
Soluble Chloride (Cl)	mg/L	28.4	5.0	30.6	33.4	38.1	5.0	40.1	40.6	5.0	6634727
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	10.8	1.9	11.3	12.2	13.7	1.8	15.3		1.9	6619736
Soluble Sodium (Na)	mg/kg	14.9	1.9	13.8	14.8	16.6	1.8	16.8		1.9	6619736
Soluble Parameters											
Soluble Conductivity	uS/cm	389	1.0	399	298	455	1.0	427	451	1.0	6632009
Soluble pH	pH Units	7.13	N/A	7.15	7.20	7.23	N/A	7.22	7.27	N/A	6631970
Wet Soluble Calcium (Ca)	mg/L	42.7	5.0	47.6	45.9	47.4	5.0	48.9	45.4	5.0	6634640
Saturation %	%	38.1	1.0	36.9	36.4	36.0	1.0	38.2	38.7	1.0	6631955
Wet Soluble Magnesium (Mg)	mg/L	9.6	5.0	11.4	11.6	12.1	5.0	12.8	11.8	5.0	6634640
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	<20	20	<20	<20	20	6634640
Wet Soluble Sodium (Na)	mg/L	39.0	5.0	37.5	40.6	46.0	5.0	43.9	44.8	5.0	6634640
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	33	30	31	31	30	6634640
Sodium Adsorption Ratio	N/A	1.40	0.10	1.27	1.39	1.54	0.10	1.44		0.10	6619735

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT8366		FT8367			FT8368		FT8369	FT8369		
Sampling Date		2013/03/04		2013/03/04			2013/03/04		2013/03/04	2013/03/04		
	UNITS	**SP13-57-130304**	**RDL**	**SP13-58-130304**	**RDL**	**QC Batch**	**SP13-59-130304**	**RDL**	**SP13-60-130304**	**SP13-60-130304 Lab-Dup**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	54	10	61	10	6634728	168	10	89	89	10	6641235
Soluble Chloride (Cl)	mg/L	33.6	5.0	47.0	5.0	6634727	81.0	5.0	59.1	58.3	5.0	6641223
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	13.4	2.0	18.3	1.9	6619736	32.0	2.0	20.5		1.7	6619736
Soluble Sodium (Na)	mg/kg	15.8	2.0	16.8	1.9	6619736	24.9	2.0	19.7		1.7	6619736
Soluble Parameters												
Soluble Conductivity	uS/cm	330	1.0	451	1.0	6632009	652	1.0	540	539	1.0	6636600
Soluble pH	pH Units	7.14	N/A	7.08	N/A	6631970	7.21	N/A	7.25	7.21	N/A	6636598
Wet Soluble Calcium (Ca)	mg/L	46.2	5.0	48.4	5.0	6634640	71.1	5.0	59.9	60.4	5.0	6639930
Saturation %	%	39.8	1.0	38.9	1.0	6631955	39.5	1.0	34.7	35.1	1.0	6636590
Wet Soluble Magnesium (Mg)	mg/L	10.2	5.0	10.5	5.0	6634640	19.0	5.0	17.4	18.2	5.0	6639930
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	6634640	<20	20	<20	<20	20	6639930
Wet Soluble Sodium (Na)	mg/L	39.7	5.0	43.2	5.0	6634640	63.0	5.0	56.9	57.5	5.0	6639930
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	6634640	62	30	37	37	30	6639930
Sodium Adsorption Ratio	N/A	1.38	0.10	1.47	0.10	6619735	1.71	0.10	1.66		0.10	6619735

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT8370		FT8393	FT8394	FT8395		
Sampling Date		2013/03/04		2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-60-01-130304**	**RDL**	**SP13-61-130304**	**SP13-62-130304**	**SP13-63-130304**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	96	10	87	100	396	10	6641235
Soluble Chloride (Cl)	mg/L	50.0	5.0	44.8	52.6	49.2	5.0	6641223
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	19.2	1.9	16.4	18.6	17.2	1.8	6619736
Soluble Sodium (Na)	mg/kg	20.4	1.9	18.6	20.9	21.5	1.8	6619736
Soluble Parameters								
Soluble Conductivity	uS/cm	539	1.0	486	585	1000	1.0	6636600
Soluble pH	pH Units	7.30	N/A	7.34	7.36	7.11	N/A	6636598
Wet Soluble Calcium (Ca)	mg/L	60.6	5.0	56.0	62.5	139	5.0	6639930
Saturation %	%	38.4	1.0	36.5	35.5	35.0	1.0	6636590
Wet Soluble Magnesium (Mg)	mg/L	15.3	5.0	16.4	21.0	35.6	5.0	6639930
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	<20	20	6639930
Wet Soluble Sodium (Na)	mg/L	53.0	5.0	51.1	59.1	61.4	5.0	6639930
Wet Soluble Sulphur (S)	mg/L	45	30	36	49	139	30	6639930
Sodium Adsorption Ratio	N/A	1.58	0.10	1.54	1.65	1.20	0.10	6619735

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FT8396		FT8397	FT8398		FT8399		
Sampling Date		2013/03/04		2013/03/04	2013/03/04		2013/03/04		
	UNITS	**SP13-64-130304**	**RDL**	**SP13-65-130304**	**SP13-66-130304**	**RDL**	**SP13-67-130304**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	146	10	95	88	10	95	10	6641235
Soluble Chloride (Cl)	mg/L	46.1	5.0	43.0	52.4	5.0	34.5	5.0	6641223
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	17.8	1.9	15.4	19.2	1.8	13.0	1.9	6619736
Soluble Sodium (Na)	mg/kg	21.2	1.9	18.1	21.5	1.8	18.4	1.9	6619736
Soluble Parameters									
Soluble Conductivity	uS/cm	603	1.0	537	501	1.0	486	1.0	6636600
Soluble pH	pH Units	7.20	N/A	7.25	7.15	N/A	7.19	N/A	6636598
Wet Soluble Calcium (Ca)	mg/L	74.0	5.0	59.5	50.5	5.0	54.4	5.0	6639930
Saturation %	%	38.7	1.0	35.8	36.6	1.0	37.8	1.0	6636590
Wet Soluble Magnesium (Mg)	mg/L	22.3	5.0	18.1	18.2	5.0	16.1	5.0	6639930
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	20	<20	20	6639930
Wet Soluble Sodium (Na)	mg/L	54.8	5.0	50.6	58.9	5.0	48.6	5.0	6639930
Wet Soluble Sulphur (S)	mg/L	57	30	40	34	30	38	30	6639930
Sodium Adsorption Ratio	N/A	1.43	0.10	1.47	1.81	0.10	1.49	0.10	6619735

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

Package 1	3.7°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - additional TCLP arsenic analysis has been completed as per clients' request. KD4 - March 15/13

Maxxam

Success Through Science®

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6623469	Total Antimony (Sb)	2013/03/06	103	75 - 125	96	75 - 125	<0.10	mg/kg	NC	30	97	70 - 130
6623469	Total Arsenic (As)	2013/03/06	97	75 - 125	95	75 - 125	0.59, RDL=0.50	mg/kg	NC	30	98	70 - 130
6623469	Total Barium (Ba)	2013/03/06	NC	75 - 125	99	75 - 125	<0.10	mg/kg	1.4	35	100	70 - 130
6623469	Total Beryllium (Be)	2013/03/06	109	75 - 125	99	75 - 125	<0.40	mg/kg	NC	30		
6623469	Total Cadmium (Cd)	2013/03/06	116	75 - 125	99	75 - 125	<0.050	mg/kg	NC	30	101	70 - 130
6623469	Total Chromium (Cr)	2013/03/06	104	75 - 125	100	75 - 125	<1.0	mg/kg	1.0	30	96	70 - 130
6623469	Total Cobalt (Co)	2013/03/06	102	75 - 125	99	75 - 125	<0.30	mg/kg	2.4	30	90	70 - 130
6623469	Total Copper (Cu)	2013/03/06	NC	75 - 125	101	75 - 125	<0.50	mg/kg	2.3	30	84	70 - 130
6623469	Total Lead (Pb)	2013/03/06	106	75 - 125	101	75 - 125	<0.10	mg/kg	2.0	35	96	70 - 130
6623469	Total Lithium (Li)	2013/03/06	102	75 - 125	95	75 - 125	<5.0	mg/kg	NC	30		
6623469	Total Manganese (Mn)	2013/03/06	NC	75 - 125	101	75 - 125	<0.20	mg/kg	1	30	97	70 - 130
6623469	Total Mercury (Hg)	2013/03/06	113	75 - 125	97	75 - 125	<0.050	mg/kg	NC	35	75	70 - 130
6623469	Total Molybdenum (Mo)	2013/03/06	107	75 - 125	98	75 - 125	<0.10	mg/kg	3.3	35	102	70 - 130
6623469	Total Nickel (Ni)	2013/03/06	104	75 - 125	99	75 - 125	<0.80	mg/kg	0.4	30	86	70 - 130
6623469	Total Selenium (Se)	2013/03/06	91	75 - 125	100	75 - 125	<0.50	mg/kg	NC	30		
6623469	Total Silver (Ag)	2013/03/06	93	75 - 125	95	75 - 125	<0.050	mg/kg	NC	35		
6623469	Total Strontium (Sr)	2013/03/06	NC	75 - 125	96	75 - 125	<0.10	mg/kg	0.1	35	98	70 - 130
6623469	Total Thallium (Tl)	2013/03/06	105	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	85	70 - 130
6623469	Total Tin (Sn)	2013/03/06	100	75 - 125	93	75 - 125	<0.10	mg/kg	NC	35		
6623469	Total Titanium (Ti)	2013/03/06	NC	75 - 125	99	75 - 125	<1.0	mg/kg	0.1	35	98	70 - 130
6623469	Total Uranium (U)	2013/03/06	105	75 - 125	98	75 - 125	<0.050	mg/kg	1.6	30	94	70 - 130
6623469	Total Vanadium (V)	2013/03/06	NC	75 - 125	99	75 - 125	<2.0	mg/kg	1.1	30	103	70 - 130
6623469	Total Zinc (Zn)	2013/03/06	NC	75 - 125	100	75 - 125	<1.0	mg/kg	1.1	30	93	70 - 130
6623469	Total Aluminum (Al)	2013/03/06					<100	mg/kg	2.0	35	98	70 - 130
6623469	Total Calcium (Ca)	2013/03/06					<100	mg/kg	0.03	30	95	70 - 130
6623469	Total Iron (Fe)	2013/03/06					<100	mg/kg	1.7	30	93	70 - 130
6623469	Total Magnesium (Mg)	2013/03/06					<100	mg/kg	0.1	30	90	70 - 130
6623469	Total Phosphorus (P)	2013/03/06					<10	mg/kg	1.3	30	94	70 - 130
6623469	Total Bismuth (Bi)	2013/03/06					<0.10	mg/kg	NC	30		
6623469	Total Potassium (K)	2013/03/06					<100	mg/kg	1.4	35		
6623469	Total Sodium (Na)	2013/03/06					<100	mg/kg	NC	35		
6623469	Total Zirconium (Zr)	2013/03/06					<0.50	mg/kg	NC	30		
6623474	Soluble (2:1) pH	2013/03/06			101	96 - 104			0.6	20		
6628897	Moisture	2013/03/09					<0.30	%	2.3	20		
6630948	Moisture	2013/03/09					<0.30	%	6.7	20		
6630952	Moisture	2013/03/09					<0.30	%	5.5	20		
6631955	Saturation %	2013/03/08			103	80 - 120	<1.0	%	1.1	30		
6631970	Soluble pH	2013/03/08			101	97 - 103			0.7	20		
6632009	Soluble Conductivity	2013/03/11			103	70 - 130	<1.0	uS/cm	5.3	35		

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6632431	Moisture	2013/03/11					<0.30	%	0.5	20		
6633894	D10-ANTHRACENE (sur.)	2013/03/09	95	60 - 130	74	60 - 130	78	%				
6633894	D8-ACENAPHTHYLENE (sur.)	2013/03/09	66	50 - 130	77	50 - 130	78	%				
6633894	D8-NAPHTHALENE (sur.)	2013/03/09	67	50 - 130	77	50 - 130	79	%				
6633894	TERPHENYL-D14 (sur.)	2013/03/09	71	60 - 130	86	60 - 130	91	%				
6633894	Naphthalene	2013/03/09	71	40 - 130	82	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	2-Methylnaphthalene	2013/03/09	72	40 - 130	83	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	Acenaphthylene	2013/03/09	73	40 - 130	82	40 - 130	<0.00050	mg/kg	NC(1)	50		
6633894	Acenaphthene	2013/03/09	73	40 - 130	85	40 - 130	<0.00050	mg/kg	42.3(1)	50		
6633894	Fluorene	2013/03/09	71	40 - 130	85	40 - 130	<0.0010	mg/kg	NC(1)	50		
6633894	Phenanthrene	2013/03/09	NC	40 - 130	79	40 - 130	<0.0010	mg/kg	64.2(2, 1)	50		
6633894	Anthracene	2013/03/09	73	40 - 130	89	40 - 130	<0.0010	mg/kg	65.6(2, 1)	50		
6633894	Fluoranthene	2013/03/09	NC	40 - 130	87	40 - 130	0.0011, RDL=0.0010	mg/kg	65.2(2, 1)	50		
6633894	Pyrene	2013/03/09	NC	40 - 130	88	40 - 130	<0.0010	mg/kg	57.9(2, 1)	50		
6633894	Benzo(a)anthracene	2013/03/09	54	40 - 130	82	40 - 130	<0.0010	mg/kg	57.3(2, 1)	50		
6633894	Chrysene	2013/03/09	54	40 - 130	83	40 - 130	<0.0010	mg/kg	48.0(1)	50		
6633894	Benzo(b&j)fluoranthene	2013/03/09	NC	40 - 130	87	40 - 130	0.0010, RDL=0.0010	mg/kg	48.2(1)	50		
6633894	Benzo(k)fluoranthene	2013/03/09	67	40 - 130	85	40 - 130	<0.0010	mg/kg	52.6(2, 1)	50		
6633894	Benzo(a)pyrene	2013/03/09	62	40 - 130	88	40 - 130	<0.0010	mg/kg	50.0(1)	50		
6633894	Indeno(1,2,3-cd)pyrene	2013/03/09	68	40 - 130	86	40 - 130	<0.0020	mg/kg	NC(1)	50		
6633894	Dibenz(a,h)anthracene	2013/03/09	75	40 - 130	85	40 - 130	<0.00050	mg/kg	NC(1)	50		
6633894	Benzo(g,h,i)perylene	2013/03/09	64	40 - 130	83	40 - 130	<0.0020	mg/kg	NC(1)	50		
6634640	Wet Soluble Calcium (Ca)	2013/03/11					<5.0	mg/L	7.2	30		
6634640	Wet Soluble Magnesium (Mg)	2013/03/11					<5.0	mg/L	NC	30		
6634640	Wet Soluble Potassium (K)	2013/03/11					<20	mg/L	NC	30		
6634640	Wet Soluble Sodium (Na)	2013/03/11					<5.0	mg/L	2.2	30		
6634640	Wet Soluble Sulphur (S)	2013/03/11					<30	mg/L	NC	30		
6634727	Soluble Chloride (Cl)	2013/03/08					<5.0	mg/L	1.2	30		
6634728	Soluble Sulphate (SO4)	2013/03/08					<10	mg/L	NC	30		
6636590	Saturation %	2013/03/11			104	80 - 120	<1.0	%	1.2	30		
6636598	Soluble pH	2013/03/11			100	97 - 103			0.6	20		
6636600	Soluble Conductivity	2013/03/12			108	70 - 130	<1.0	uS/cm	0.2	35		
6639687	D10-ANTHRACENE (sur.)	2013/03/11	70	60 - 130	79	60 - 130	82	%				
6639687	D8-ACENAPHTHYLENE (sur.)	2013/03/11	65	50 - 130	76	50 - 130	81	%				
6639687	D8-NAPHTHALENE (sur.)	2013/03/11	65	50 - 130	77	50 - 130	83	%				
6639687	TERPHENYL-D14 (sur.)	2013/03/11	70	60 - 130	82	60 - 130	84	%				
6639687	Naphthalene	2013/03/11	70	40 - 130	82	40 - 130	0.0011, RDL=0.0010	mg/kg	NC(1)	50		
6639687	2-Methylnaphthalene	2013/03/11	71	40 - 130	83	40 - 130	<0.0010	mg/kg	NC(1)	50		
6639687	Acenaphthylene	2013/03/11	74	40 - 130	84	40 - 130	<0.00050	mg/kg	NC(1)	50		

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Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6639687	Acenaphthene	2013/03/11	69	40 - 130	86	40 - 130	<0.00050	mg/kg	81.0(2, 1)	50		
6639687	Fluorene	2013/03/11	71	40 - 130	87	40 - 130	<0.0010	mg/kg	NC(1)	50		
6639687	Phenanthrene	2013/03/11	NC	40 - 130	86	40 - 130	<0.0010	mg/kg	50.2(2, 1)	50		
6639687	Anthracene	2013/03/11	65	40 - 130	89	40 - 130	<0.0010	mg/kg	48.3(1)	50		
6639687	Fluoranthene	2013/03/11	NC	40 - 130	91	40 - 130	<0.0010	mg/kg	30.2(1)	50		
6639687	Pyrene	2013/03/11	NC	40 - 130	88	40 - 130	<0.0010	mg/kg	29.7(1)	50		
6639687	Benzo(a)anthracene	2013/03/11	57	40 - 130	89	40 - 130	<0.0010	mg/kg	39.7(1)	50		
6639687	Chrysene	2013/03/11	57	40 - 130	93	40 - 130	<0.0010	mg/kg	33.2(1)	50		
6639687	Benzo(b&j)fluoranthene	2013/03/11	NC	40 - 130	86	40 - 130	<0.0010	mg/kg	43.8(1)	50		
6639687	Benzo(k)fluoranthene	2013/03/11	49	40 - 130	98	40 - 130	<0.0010	mg/kg	43.3(1)	50		
6639687	Benzo(a)pyrene	2013/03/11	NC	40 - 130	96	40 - 130	<0.0010	mg/kg	49.7(1)	50		
6639687	Indeno(1,2,3-cd)pyrene	2013/03/11	68	40 - 130	91	40 - 130	<0.0020	mg/kg	53.6(2, 1)	50		
6639687	Dibenz(a,h)anthracene	2013/03/11	81	40 - 130	89	40 - 130	<0.00050	mg/kg	NC(1)	50		
6639687	Benzo(g,h,i)perylene	2013/03/11	62	40 - 130	88	40 - 130	<0.0020	mg/kg	52.5(2, 1)	50		
6639930	Wet Soluble Calcium (Ca)	2013/03/12					<5.0	mg/L	0.8	30		
6639930	Wet Soluble Magnesium (Mg)	2013/03/12					<5.0	mg/L	NC	30		
6639930	Wet Soluble Potassium (K)	2013/03/12					<20	mg/L	NC	30		
6639930	Wet Soluble Sodium (Na)	2013/03/12					<5.0	mg/L	1.1	30		
6639930	Wet Soluble Sulphur (S)	2013/03/12					<30	mg/L	NC	30		
6641223	Soluble Chloride (Cl)	2013/03/12					<5.0	mg/L	1.4	30		
6641235	Soluble Sulphate (SO4)	2013/03/12					<10	mg/L	0.5	30		
6650658	Initial pH of Sample	2013/03/15					4.90, RDL=N/A	pH Units	0.2	20		
6650658	Final pH of Leachate	2013/03/15					4.90, RDL=N/A	pH Units	1	20		
6650658	pH of Leaching Fluid	2013/03/15					4.90, RDL=N/A	pH Units	0	20		
6650658	pH after HCl	2013/03/15							2.5	20		
6654094	LEACHATE Arsenic (As)	2013/03/15	106	75 - 125	105	75 - 125	<0.10	mg/L	NC	35		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.

Maxxam Job #: B317135
Report Date: 2013/03/18

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample dilution.
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B317135	353258
Address:	641 - 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:			
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#053268-07-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT8361	SP13-52-130304	Mar 4/13		Soil		X	X						X			2	
2	FT8362	SP13-53-130304					X	X						X				
3	FT8363	SP13-54-130304					X	X						X				
4	FT8364	SP13-55-130304					X	X						X				
5	FT8365	SP13-56-130304					X	X						X				
6	FT8366	SP13-57-130304					X	X						X				
7	FT8367	SP13-58-130304					X	X						X				
8	FT8368	SP13-59-130304					X	X						X				
9	FT8369	SP13-60-130304					X	X						X				
10	FT8370	SP13-60-01-130304					X	X						X				

B317135

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MEdwards / MARK EDWARDS	13/03/04	1620	[illegible]	13/03/05	0800		[ ]	4.25	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free (800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B317135	353268
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#353268-08-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FT8393	SP13-61-130304	130304		Soil		X	X						X			2	
2	FT8394	SP13-62-130304	130304				X	X						X				
3	FT8395	SP13-63-130304	130304				X	X						X				
4	FT8396	SP13-64-130304	130304				X	X						X				
5	FT8397	SP13-65-130304	130304				X	X						X				
6	FT8398	SP13-66-130304	130304				X	X						X				
7	FT8399	~~SP13-66-130304~~ SB	~~1304~~				X	X						X				
8	FT8400.	SP13-67-130304	130304				X	X						X				
9																		
10																		

B317135

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/04	16:20	[illegible]	13/03/05	08:00		[ ]	4.25	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18
Your C.O.C. #: 35326809, 35326811, 35326812

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/21
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B317896
Received: 2013/03/06, 08:00

Sample Matrix: Soil
Samples Received: 25

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	4	2013/03/08	2013/03/11	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	19	2013/03/11	2013/03/12	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	6	2013/03/12	2013/03/13	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	19	2013/03/11	2013/03/12	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	6	2013/03/12	2013/03/13	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	4	N/A	2013/03/12	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	4	2013/03/08	2013/03/13	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	9	2013/03/08	2013/03/08	BBY7SOP-00001	EPA 6020A
Elements by ICPMS (total)	10	2013/03/09	2013/03/11	BBY7SOP-00001	EPA 6020A
Elements by ICPMS (total)	6	2013/03/10	2013/03/11	BBY7SOP-00001	EPA 6020A
Metals - TCLP	1	2013/03/18	2013/03/19	BBY7SOP-00001	EPA 6020A
Moisture	4	N/A	2013/03/09	BBY8SOP-00017	Ont MOE -E 3139
Moisture	21	N/A	2013/03/12	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	13	2013/03/11	2013/03/12	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	9	2013/03/11	2013/03/13	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/03/12	2013/03/13	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	25	N/A	2013/03/13	BBY WI-00033	CCME Guidelines
PAH on Leachate by GC/MS (SIM)	1	2013/03/20	2013/03/21	BBY8SOP-00021	EPA 8270D
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/21	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	25	N/A	2013/03/13	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	9	2013/03/08	2013/03/08	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	16	2013/03/11	2013/03/11	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	4	2013/03/11	2013/03/11	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	15	2013/03/11	2013/03/12	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	6	2013/03/12	2013/03/13	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	1	N/A	2013/03/19	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	9	N/A	2013/03/08		
Sodium Adsorption Ratio SP	10	N/A	2013/03/11		
Sodium Adsorption Ratio SP	6	N/A	2013/03/12		
Saturated Paste	4	2013/03/11	2013/03/11	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	15	2013/03/11	2013/03/12	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	6	2013/03/12	2013/03/13	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	19	N/A	2013/03/12		
Soluble Ions Na, Cl	6	N/A	2013/03/13		
Sulphate (soluble) (soil)	19	2013/03/11	2013/03/12	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	6	2013/03/12	2013/03/13	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	19	N/A	2013/03/12	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	6	N/A	2013/03/13	BBY7SOP-00002	EPA 6020A
BC Hydrocarbons in Soil by GC/FID	1	2013/03/08	2013/03/13	BBY8SOP-00029	BC Env Lab Manual
BC Hydrocarbons in Soil by GC/FID	3	2013/03/11	2013/03/13	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	4	N/A	2013/03/12	BBY WI-00033	BC MOE Lab Method

Maxxam Job #: B317896
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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Report Date: 2013/03/21

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Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FU4513	FU4518	FU4524	FU4528		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-76-130305**	**SP13-80-130305**	**SP13-86-130305**	**SP13-90-130305**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	16	12	<10	19	10	6643927
F3 (C16-C34 Hydrocarbons)	mg/kg	180	180	110	210	10	6643927
F4 (C34-C50 Hydrocarbons)	mg/kg	160	220	87	280	10	6643927
Reached Baseline at C50	mg/kg	NO	NO	NO	NO	N/A	6643927
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	91	90	94	105		6643927

PHYSICAL TESTING (SOIL)

Maxxam ID		FU4511		FU4512		FU4513		FU4514	FU4515		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/05	2013/03/05		
	UNITS	**SP13-74-130305**	**QC Batch**	**SP13-75-130305**	**QC Batch**	**SP13-76-130305**	**QC Batch**	**SP13-77-130305**	**SP13-78-130305**	**RDL**	**QC Batch**
Physical Properties											
Moisture	%	16	6636321	16	6636250	17	6630948	16	17	0.30	6636321

Maxxam ID		FU4516	FU4517		FU4518		FU4519		
Sampling Date		2013/03/05	2013/03/05		2013/03/05		2013/03/05		
	UNITS	**SP13-79-130305**	**SP13-79-01-130305**	**QC Batch**	**SP13-80-130305**	**QC Batch**	**SP13-81-130305**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	17	16	6636250	17	6630948	17	0.30	6636250

Maxxam ID		FU4520	FU4520		FU4521		FU4522		
Sampling Date		2013/03/05	2013/03/05		2013/03/05		2013/03/05		
	UNITS	**SP13-82-130305**	**SP13-82-130305 Lab-Dup**	**QC Batch**	**SP13-83-130305**	**QC Batch**	**SP13-84-130305**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	16	16	6636321	17	6636250	16	0.30	6636321

N/A = Not Applicable
RDL = Reportable Detection Limit

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PHYSICAL TESTING (SOIL)

Maxxam ID		FU4523		FU4524		FU4525		FU4526		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/05		
	UNITS	**SP13-85-130305**	**QC Batch**	**SP13-86-130305**	**QC Batch**	**SP13-87-130305**	**QC Batch**	**SP13-88-130305**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	15	6636250	15	6630948	16	6636250	15	0.30	6636321

Maxxam ID		FU4527		FU4528		FU4529		FV0705		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/04		
	UNITS	**SP13-89-130305**	**QC Batch**	**SP13-90-130305**	**QC Batch**	**SP13-90-01-130305**	**QC Batch**	**SP13-68-130304**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	15	6636321	16	6630948	14	6636321	17	0.30	6636250

Maxxam ID		FV0706	FV0707	FV0708	FV0709		FV0711		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04		2013/03/04		
	UNITS	**SP13-69-130304**	**SP13-70-130304**	**SP13-71-130304**	**SP13-72-130304**	**QC Batch**	**SP13-73-130304**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	11	18	18	17	6636250	17	0.30	6636197

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FU4528		
Sampling Date		2013/03/05		
	UNITS	**SP13-90-130305**	**RDL**	**QC Batch**
TCLP Extraction Procedure				
Initial pH of Sample	pH Units	9.16	N/A	6659576
pH after HCl	pH Units	2.00	N/A	6659576
Final pH of Leachate	pH Units	536	N/A	6659576
pH of Leaching Fluid	pH Units	4.90	N/A	6659576

N/A = Not Applicable
RDL = Reportable Detection Limit

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TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FU4513	FU4518	FU4524	FU4528		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-76-130305**	**SP13-80-130305**	**SP13-86-130305**	**SP13-90-130305**	**RDL**	**QC Batch**
Hydrocarbons							
EPH (C10-C19)	mg/kg	<100	<100	<100	<100	100	6644658
EPH (C19-C32)	mg/kg	116	132	<100	130	100	6644658
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	90	96	97	92		6644658

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FU4513		FU4518		FU4524	FU4528		
Sampling Date		2013/03/05		2013/03/05		2013/03/05	2013/03/05		
	UNITS	**SP13-76-130305**	**RDL**	**SP13-80-130305**	**RDL**	**SP13-86-130305**	**SP13-90-130305**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	10	<10	10	<10	<10	10	6625484
Volatiles									
VPH (VH6 to 10 - BTEX)	mg/kg	<10	10	<10	10	<10	<10	10	6623130
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	0.10	<0.10	0.10	<0.10	<0.10	0.10	6638321
Benzene	mg/kg	<0.0050	0.0050	<0.0081 (1)	0.0081	<0.0050	<0.0050	0.0050	6638321
Toluene	mg/kg	<0.020	0.020	0.034	0.020	<0.020	<0.020	0.020	6638321
Ethylbenzene	mg/kg	<0.010	0.010	0.013	0.010	<0.010	<0.010	0.010	6638321
m & p-Xylene	mg/kg	<0.040	0.040	0.064	0.040	<0.040	<0.040	0.040	6638321
o-Xylene	mg/kg	<0.040	0.040	<0.040	0.040	<0.040	<0.040	0.040	6638321
Styrene	mg/kg	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	6638321
Xylenes (Total)	mg/kg	<0.040	0.040	0.064	0.040	<0.040	<0.040	0.040	6638321
VH C6-C10	mg/kg	<10	10	<10	10	<10	<10	10	6638321
(C6-C10)	mg/kg	<10	10	<10	10	<10	<10	10	6638321
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	95		95		110	95		6638321
4-BROMOFLUOROBENZENE (sur.)	%	101		99		100	100		6638321
D10-ETHYLBENZENE (sur.)	%	108		104		104	106		6638321
D4-1,2-DICHLOROETHANE (sur.)	%	103		102		102	104		6638321

RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU4511	FU4512	FU4513	FU4514	FU4515	FU4516		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-74-130305**	**SP13-75-130305**	**SP13-76-130305**	**SP13-77-130305**	**SP13-78-130305**	**SP13-79-130305**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.29	7.59	7.49	7.73	7.77	7.69	0.010	6631484
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22900	21300	22100	20900	20900	20600	100	6631434
Total Antimony (Sb)	mg/kg	19.3	37.9	37.6	46.7	29.0	32.7	0.10	6631434
Total Arsenic (As)	mg/kg	39.5	85.8	78.1	113	57.3	88.6	0.50	6631434
Total Barium (Ba)	mg/kg	117	114	117	131	121	110	0.10	6631434
Total Beryllium (Be)	mg/kg	0.40	0.45	0.41	<0.40	<0.40	<0.40	0.40	6631434
Total Bismuth (Bi)	mg/kg	0.19	0.43	0.32	0.31	0.24	0.46	0.10	6631434
Total Cadmium (Cd)	mg/kg	0.399	0.599	0.552	0.554	0.583	0.708	0.050	6631434
Total Calcium (Ca)	mg/kg	7540	10100	9060	10100	11400	8740	100	6631434
Total Chromium (Cr)	mg/kg	43.4	42.2	43.2	46.6	52.1	40.0	1.0	6631434
Total Cobalt (Co)	mg/kg	14.9	16.0	15.1	15.1	14.8	15.0	0.30	6631434
Total Copper (Cu)	mg/kg	122	152	221	176	188	1450	0.50	6631434
Total Iron (Fe)	mg/kg	31200	30600	31000	31700	31700	32200	100	6631434
Total Lead (Pb)	mg/kg	58.2	103	109	113	133	117	0.10	6631434
Total Lithium (Li)	mg/kg	13.7	12.6	12.7	12.2	12.2	12.8	5.0	6631434
Total Magnesium (Mg)	mg/kg	7860	7760	7070	7670	7770	7830	100	6631434
Total Manganese (Mn)	mg/kg	688	642	606	573	568	550	0.20	6631434
Total Mercury (Hg)	mg/kg	0.155	0.234	0.230	0.266	0.322	0.231	0.050	6631434
Total Molybdenum (Mo)	mg/kg	2.48	4.60	5.22	4.84	4.57	5.65	0.10	6631434
Total Nickel (Ni)	mg/kg	31.7	31.7	32.2	32.0	32.1	31.7	0.80	6631434
Total Phosphorus (P)	mg/kg	612	660	703	682	758	803	10	6631434
Total Potassium (K)	mg/kg	711	770	811	782	738	786	100	6631434
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6631434
Total Silver (Ag)	mg/kg	0.119	0.190	0.196	0.199	0.162	0.371	0.050	6631434
Total Sodium (Na)	mg/kg	221	317	331	441	308	303	100	6631434
Total Strontium (Sr)	mg/kg	42.9	58.0	55.1	59.3	66.8	51.3	0.10	6631434
Total Thallium (Tl)	mg/kg	0.082	0.101	0.097	0.099	0.080	0.101	0.050	6631434
Total Tin (Sn)	mg/kg	4.04	8.47	7.93	7.53	24.2	231	0.10	6631434
Total Titanium (Ti)	mg/kg	1030	1020	1060	1040	1040	881	1.0	6631434
Total Uranium (U)	mg/kg	0.704	0.858	0.919	0.932	0.809	0.897	0.050	6631434
Total Vanadium (V)	mg/kg	78.1	73.0	74.0	74.0	73.9	73.2	2.0	6631434
Total Zinc (Zn)	mg/kg	296	504	503	589	503	552	1.0	6631434
Total Zirconium (Zr)	mg/kg	3.55	3.09	3.05	3.24	2.77	2.65	0.50	6631434

RDL = Reportable Detection Limit

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Report Date: 2013/03/21

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Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU4517	FU4517	FU4518		FU4519		FU4520		
Sampling Date		2013/03/05	2013/03/05	2013/03/05		2013/03/05		2013/03/05		
	UNITS	**SP13-79-01-130305**	**SP13-79-01-130305 Lab-Dup**	**SP13-80-130305**	**QC Batch**	**SP13-81-130305**	**QC Batch**	**SP13-82-130305**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	7.74	7.86	7.87	6631484	7.67	6631427	7.76	0.010	6635068
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	20600	20400	20800	6631434	19700	6631417	22900	100	6635064
Total Antimony (Sb)	mg/kg	39.4	39.2	26.8	6631434	40.7	6631417	31.9	0.10	6635064
Total Arsenic (As)	mg/kg	77.3	76.0	52.4	6631434	82.5	6631417	62.2	0.50	6635064
Total Barium (Ba)	mg/kg	110	109	113	6631434	115	6631417	113	0.10	6635064
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.42	6631434	<0.40	6631417	<0.40	0.40	6635064
Total Bismuth (Bi)	mg/kg	0.26	0.25	0.51	6631434	0.30	6631417	0.23	0.10	6635064
Total Cadmium (Cd)	mg/kg	0.512	0.504	0.495	6631434	0.538	6631417	0.494	0.050	6635064
Total Calcium (Ca)	mg/kg	8490	8550	9740	6631434	10400	6631417	11900	100	6635064
Total Chromium (Cr)	mg/kg	39.3	38.9	38.6	6631434	45.0	6631417	41.6	1.0	6635064
Total Cobalt (Co)	mg/kg	16.5	16.3	14.4	6631434	16.9	6631417	14.8	0.30	6635064
Total Copper (Cu)	mg/kg	161	154	222	6631434	191	6631417	166	0.50	6635064
Total Iron (Fe)	mg/kg	30200	29600	32700	6631434	30800	6631417	30700	100	6635064
Total Lead (Pb)	mg/kg	103	100	101	6631434	127	6631417	99.2	0.10	6635064
Total Lithium (Li)	mg/kg	12.1	11.9	12.1	6631434	11.6	6631417	13.1	5.0	6635064
Total Magnesium (Mg)	mg/kg	7880	7740	8170	6631434	7380	6631417	7420	100	6635064
Total Manganese (Mn)	mg/kg	556	549	599	6631434	553	6631417	555	0.20	6635064
Total Mercury (Hg)	mg/kg	0.242	0.239	0.255	6631434	0.274	6631417	0.239	0.050	6635064
Total Molybdenum (Mo)	mg/kg	3.84	3.77	3.88	6631434	7.06	6631417	4.50	0.10	6635064
Total Nickel (Ni)	mg/kg	30.4	29.7	30.8	6631434	31.8	6631417	32.0	0.80	6635064
Total Phosphorus (P)	mg/kg	689	670	705	6631434	678	6631417	653	10	6635064
Total Potassium (K)	mg/kg	724	705	715	6631434	738	6631417	779	100	6635064
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	6631434	<0.50	6631417	<0.50	0.50	6635064
Total Silver (Ag)	mg/kg	0.160	0.160	0.377	6631434	0.253	6631417	0.159	0.050	6635064
Total Sodium (Na)	mg/kg	348	315	318	6631434	284	6631417	334	100	6635064
Total Strontium (Sr)	mg/kg	51.6	50.4	53.1	6631434	57.0	6631417	66.6	0.10	6635064
Total Thallium (Tl)	mg/kg	0.080	0.077	0.084	6631434	0.087	6631417	0.093	0.050	6635064
Total Tin (Sn)	mg/kg	8.44	7.95	20.1	6631434	8.12	6631417	9.37	0.10	6635064
Total Titanium (Ti)	mg/kg	993	977	1070	6631434	876	6631417	1030	1.0	6635064
Total Uranium (U)	mg/kg	0.778	0.725	0.714	6631434	0.815	6631417	0.759	0.050	6635064
Total Vanadium (V)	mg/kg	73.0	73.0	74.6	6631434	69.7	6631417	73.3	2.0	6635064
Total Zinc (Zn)	mg/kg	440	429	412	6631434	565	6631417	483	1.0	6635064
Total Zirconium (Zr)	mg/kg	2.60	2.51	2.77	6631434	2.51	6631417	3.42	0.50	6635064

RDL = Reportable Detection Limit

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Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU4521	FU4522	FU4523	FU4524	FU4525	FU4526		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-83-130305**	**SP13-84-130305**	**SP13-85-130305**	**SP13-86-130305**	**SP13-87-130305**	**SP13-88-130305**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.78	7.73	7.78	7.70	7.79	7.84	0.010	6635068
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22400	22400	21900	22200	21200	21300	100	6635064
Total Antimony (Sb)	mg/kg	36.9	27.4	37.1	40.1	53.5	42.0	0.10	6635064
Total Arsenic (As)	mg/kg	72.5	53.0	68.6	83.3	111	74.2	0.50	6635064
Total Barium (Ba)	mg/kg	110	113	121	116	111	125	0.10	6635064
Total Beryllium (Be)	mg/kg	0.43	0.42	0.46	<0.40	<0.40	<0.40	0.40	6635064
Total Bismuth (Bi)	mg/kg	0.25	0.23	0.26	0.33	0.32	0.22	0.10	6635064
Total Cadmium (Cd)	mg/kg	0.527	0.536	0.575	0.578	0.434	0.662	0.050	6635064
Total Calcium (Ca)	mg/kg	9630	10000	9990	9760	11000	10100	100	6635064
Total Chromium (Cr)	mg/kg	40.9	44.7	45.0	46.8	50.8	42.4	1.0	6635064
Total Cobalt (Co)	mg/kg	14.5	14.4	14.9	15.4	15.8	15.8	0.30	6635064
Total Copper (Cu)	mg/kg	155	146	182	177	179	191	0.50	6635064
Total Iron (Fe)	mg/kg	30000	29500	30400	30400	30100	30000	100	6635064
Total Lead (Pb)	mg/kg	101	88.2	100	112	123	135	0.10	6635064
Total Lithium (Li)	mg/kg	14.3	13.9	12.7	13.6	13.2	12.7	5.0	6635064
Total Magnesium (Mg)	mg/kg	7550	7950	7800	7770	7900	7970	100	6635064
Total Manganese (Mn)	mg/kg	577	627	601	534	586	574	0.20	6635064
Total Mercury (Hg)	mg/kg	0.251	0.233	0.333	0.332	0.296	0.443	0.050	6635064
Total Molybdenum (Mo)	mg/kg	4.27	4.01	5.02	4.40	5.81	5.87	0.10	6635064
Total Nickel (Ni)	mg/kg	31.0	33.1	33.2	34.2	33.1	34.0	0.80	6635064
Total Phosphorus (P)	mg/kg	680	720	745	666	655	711	10	6635064
Total Potassium (K)	mg/kg	808	766	722	760	781	717	100	6635064
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6635064
Total Silver (Ag)	mg/kg	0.172	0.180	0.188	0.184	0.210	0.173	0.050	6635064
Total Sodium (Na)	mg/kg	330	359	373	358	353	355	100	6635064
Total Strontium (Sr)	mg/kg	63.0	72.0	74.0	58.5	92.9	86.0	0.10	6635064
Total Thallium (Tl)	mg/kg	0.083	0.083	0.086	0.094	0.103	0.080	0.050	6635064
Total Tin (Sn)	mg/kg	9.98	5.47	7.41	7.53	9.08	8.21	0.10	6635064
Total Titanium (Ti)	mg/kg	1030	991	989	1030	911	1050	1.0	6635064
Total Uranium (U)	mg/kg	0.776	0.663	0.753	0.879	0.978	0.690	0.050	6635064
Total Vanadium (V)	mg/kg	74.7	74.3	73.0	73.2	69.0	76.9	2.0	6635064
Total Zinc (Zn)	mg/kg	473	397	475	562	592	704	1.0	6635064
Total Zirconium (Zr)	mg/kg	3.35	3.49	3.87	3.73	3.14	3.45	0.50	6635064

RDL = Reportable Detection Limit

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU4527	FU4528	FU4529		FV0705	FV0706		
Sampling Date		2013/03/05	2013/03/05	2013/03/05		2013/03/04	2013/03/04		
	UNITS	**SP13-89-130305**	**SP13-90-130305**	**SP13-90-01-130305**	**QC Batch**	**SP13-68-130304**	**SP13-69-130304**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.80	7.83	7.91	6635068	7.67	7.70	0.010	6635277
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21700	21300	19500	6635064	20800	20400	100	6635275
Total Antimony (Sb)	mg/kg	35.4	64.8	52.9	6635064	29.2	28.0	0.10	6635275
Total Arsenic (As)	mg/kg	67.6	128	111	6635064	57.2	49.8	0.50	6635275
Total Barium (Ba)	mg/kg	115	113	104	6635064	105	92.3	0.10	6635275
Total Beryllium (Be)	mg/kg	<0.40	0.47	0.42	6635064	0.41	0.43	0.40	6635275
Total Bismuth (Bi)	mg/kg	0.30	0.35	0.31	6635064	0.20	0.18	0.10	6635275
Total Cadmium (Cd)	mg/kg	0.691	0.671	0.465	6635064	0.428	0.498	0.050	6635275
Total Calcium (Ca)	mg/kg	8880	12100	8880	6635064	9320	11400	100	6635275
Total Chromium (Cr)	mg/kg	49.6	54.7	50.9	6635064	45.7	38.5	1.0	6635275
Total Cobalt (Co)	mg/kg	15.0	16.9	17.0	6635064	14.6	15.1	0.30	6635275
Total Copper (Cu)	mg/kg	224	196	174	6635064	136	131	0.50	6635275
Total Iron (Fe)	mg/kg	30400	31100	30300	6635064	31100	31200	100	6635275
Total Lead (Pb)	mg/kg	117	146	107	6635064	110	114	0.10	6635275
Total Lithium (Li)	mg/kg	13.3	12.8	12.0	6635064	13.2	12.4	5.0	6635275
Total Magnesium (Mg)	mg/kg	7780	7960	8320	6635064	7710	8190	100	6635275
Total Manganese (Mn)	mg/kg	575	544	564	6635064	570	519	0.20	6635275
Total Mercury (Hg)	mg/kg	0.475	0.303	0.253	6635064	0.246	0.249	0.050	6635275
Total Molybdenum (Mo)	mg/kg	7.43	7.77	5.84	6635064	3.30	3.14	0.10	6635275
Total Nickel (Ni)	mg/kg	68.1	34.6	91.3	6635064	29.0	28.3	0.80	6635275
Total Phosphorus (P)	mg/kg	707	705	719	6635064	642	665	10	6635275
Total Potassium (K)	mg/kg	756	764	732	6635064	769	727	100	6635275
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	6635064	<0.50	<0.50	0.50	6635275
Total Silver (Ag)	mg/kg	0.252	0.228	0.197	6635064	0.148	0.132	0.050	6635275
Total Sodium (Na)	mg/kg	302	422	346	6635064	276	352	100	6635275
Total Strontium (Sr)	mg/kg	60.9	81.4	57.8	6635064	55.3	62.0	0.10	6635275
Total Thallium (Tl)	mg/kg	0.088	0.107	0.088	6635064	0.076	0.074	0.050	6635275
Total Tin (Sn)	mg/kg	8.11	10.2	7.90	6635064	5.37	13.5	0.10	6635275
Total Titanium (Ti)	mg/kg	1030	1060	820	6635064	1030	1110	1.0	6635275
Total Uranium (U)	mg/kg	0.812	0.876	0.716	6635064	0.674	0.685	0.050	6635275
Total Vanadium (V)	mg/kg	76.5	72.3	67.3	6635064	71.6	72.4	2.0	6635275
Total Zinc (Zn)	mg/kg	553	686	578	6635064	403	383	1.0	6635275
Total Zirconium (Zr)	mg/kg	3.08	3.51	3.37	6635064	3.41	3.82	0.50	6635275

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV0707	FV0708	FV0709	FV0711		
Sampling Date		2013/03/04	2013/03/04	2013/03/04	2013/03/04		
	UNITS	**SP13-70-130304**	**SP13-71-130304**	**SP13-72-130304**	**SP13-73-130304**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	7.58	7.56	7.72	7.58	0.010	6635277
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	23100	23100	20600	20800	100	6635275
Total Antimony (Sb)	mg/kg	17.4	2.77	26.1	42.2	0.10	6635275
Total Arsenic (As)	mg/kg	32.5	11.0	69.4	91.4	0.50	6635275
Total Barium (Ba)	mg/kg	106	94.7	103	109	0.10	6635275
Total Beryllium (Be)	mg/kg	0.46	<0.40	<0.40	0.55	0.40	6635275
Total Bismuth (Bi)	mg/kg	0.20	<0.10	0.23	0.31	0.10	6635275
Total Cadmium (Cd)	mg/kg	0.385	0.320	0.508	0.476	0.050	6635275
Total Calcium (Ca)	mg/kg	8910	11000	10900	10200	100	6635275
Total Chromium (Cr)	mg/kg	42.9	34.6	40.9	39.5	1.0	6635275
Total Cobalt (Co)	mg/kg	13.4	13.0	13.9	15.5	0.30	6635275
Total Copper (Cu)	mg/kg	101	53.6	140	1410	0.50	6635275
Total Iron (Fe)	mg/kg	30400	29300	30400	30300	100	6635275
Total Lead (Pb)	mg/kg	63.3	26.3	82.1	120	0.10	6635275
Total Lithium (Li)	mg/kg	13.5	13.6	12.8	13.1	5.0	6635275
Total Magnesium (Mg)	mg/kg	7870	8800	7640	7270	100	6635275
Total Manganese (Mn)	mg/kg	620	684	591	532	0.20	6635275
Total Mercury (Hg)	mg/kg	0.187	0.115	0.269	0.204	0.050	6635275
Total Molybdenum (Mo)	mg/kg	2.35	1.12	4.23	3.92	0.10	6635275
Total Nickel (Ni)	mg/kg	30.4	28.2	28.8	29.9	0.80	6635275
Total Phosphorus (P)	mg/kg	627	628	626	627	10	6635275
Total Potassium (K)	mg/kg	757	728	760	810	100	6635275
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.50	6635275
Total Silver (Ag)	mg/kg	0.140	0.076	0.150	0.308	0.050	6635275
Total Sodium (Na)	mg/kg	239	217	272	385	100	6635275
Total Strontium (Sr)	mg/kg	60.7	51.5	56.3	65.4	0.10	6635275
Total Thallium (Tl)	mg/kg	0.083	0.067	0.081	0.096	0.050	6635275
Total Tin (Sn)	mg/kg	3.93	1.39	6.91	19.6	0.10	6635275
Total Titanium (Ti)	mg/kg	1040	1010	1070	867	1.0	6635275
Total Uranium (U)	mg/kg	0.731	0.649	0.838	0.856	0.050	6635275
Total Vanadium (V)	mg/kg	77.1	74.9	72.2	70.6	2.0	6635275
Total Zinc (Zn)	mg/kg	269	123	443	1070	1.0	6635275
Total Zirconium (Zr)	mg/kg	3.52	3.33	3.66	3.78	0.50	6635275

RDL = Reportable Detection Limit

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

TCLP METALS (SOIL)

Maxxam ID		FU4528		
Sampling Date		2013/03/05		
	UNITS	**SP13-90-130305**	**RDL**	**QC Batch**
Metals				
LEACHATE Arsenic (As)	mg/L	<0.10	0.10	6663792

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU4511	FU4512	FU4513	FU4514	FU4515	FU4516		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-74-130305**	**SP13-75-130305**	**SP13-76-130305**	**SP13-77-130305**	**SP13-78-130305**	**SP13-79-130305**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.7	3.1	5.8	2.2	3.0	4.7	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.15	0.26	0.47	0.19	0.26	0.39	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.031	0.032	0.11	0.037	0.025	0.046	0.010	6643929
2-Methylnaphthalene	mg/kg	0.032	0.053	0.054	0.035	<0.020	0.048	0.020	6643929
Acenaphthylene	mg/kg	0.016	0.031	0.066	0.024	0.040	0.052	0.0050	6643929
Acenaphthene	mg/kg	0.019	0.037	0.075	0.026	0.018	0.050	0.0050	6643929
Fluorene	mg/kg	0.021	0.046	0.058	0.030	0.022	0.060	0.020	6643929
Phenanthrene	mg/kg	0.14	0.36	0.42	0.17	0.12	0.43	0.020	6643929
Anthracene	mg/kg	0.030	0.064	0.15	0.040	0.048	0.11	0.0040	6643929
Fluoranthene	mg/kg	0.21	0.42	0.86	0.23	0.26	0.58	0.020	6643929
Pyrene	mg/kg	0.19	0.43	0.78	0.23	0.27	0.60	0.020	6643929
Benzo(a)anthracene	mg/kg	0.071	0.15	0.36	0.099	0.15	0.26	0.020	6643929
Chrysene	mg/kg	0.099	0.21	0.39	0.13	0.17	0.33	0.020	6643929
Benzo(b&j)fluoranthene	mg/kg	0.13	0.23	0.41	0.16	0.22	0.33	0.020	6643929
Benzo(k)fluoranthene	mg/kg	0.040	0.074	0.14	0.050	0.080	0.11	0.020	6643929
Benzo(a)pyrene	mg/kg	0.094	0.18	0.33	0.12	0.18	0.27	0.020	6643929
Indeno(1,2,3-cd)pyrene	mg/kg	0.063	0.11	0.18	0.080	0.11	0.16	0.050	6643929
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6643929
Benzo(g,h,i)perylene	mg/kg	0.071	0.12	0.18	0.092	0.12	0.16	0.050	6643929
Low Molecular Weight PAH`s	mg/kg	0.29	0.63	0.93	0.36	0.27	0.80	0.050	6627454
High Molecular Weight PAH`s	mg/kg	1.0	2.0	3.9	1.3	1.7	3.0	0.050	6627454
Total PAH	mg/kg	1.3	2.7	4.8	1.7	1.9	3.8	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	85	86	81	87	85	87		6643929
D8-ACENAPHTHYLENE (sur.)	%	81	83	80	84	82	84		6643929
D8-NAPHTHALENE (sur.)	%	81	83	80	83	81	83		6643929
TERPHENYL-D14 (sur.)	%	88	88	85	90	88	90		6643929

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU4517	FU4518	FU4519	FU4520	FU4521	FU4522		
Sampling Date		2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-79-01-130305**	**SP13-80-130305**	**SP13-81-130305**	**SP13-82-130305**	**SP13-83-130305**	**SP13-84-130305**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	11	6.6	3.1	2.5	2.3	3.4	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.91	0.56	0.26	0.22	0.19	0.28	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.12	0.28	0.029	0.028	0.052	0.045	0.010	6643929
2-Methylnaphthalene	mg/kg	0.086	0.25	0.028	<0.020	0.096	0.042	0.020	6643929
Acenaphthylene	mg/kg	0.053	0.029	0.028	0.021	0.026	0.033	0.0050	6643929
Acenaphthene	mg/kg	0.16	0.22	0.053	0.030	0.019	0.052	0.0050	6643929
Fluorene	mg/kg	0.20	0.26	0.057	0.029	0.023	0.052	0.020	6643929
Phenanthrene	mg/kg	1.4	1.3	0.35	0.23	0.20	0.31	0.020	6643929
Anthracene	mg/kg	0.46	0.39	0.095	0.045	0.044	0.073	0.0040	6643929
Fluoranthene	mg/kg	1.7	0.83	0.43	0.33	0.29	0.47	0.020	6643929
Pyrene	mg/kg	1.4	1.0	0.42	0.30	0.28	0.42	0.020	6643929
Benzo(a)anthracene	mg/kg	0.67	0.46	0.16	0.11	0.12	0.16	0.020	6643929
Chrysene	mg/kg	0.67	0.59	0.19	0.15	0.14	0.21	0.020	6643929
Benzo(b&j)fluoranthene	mg/kg	0.78	0.43	0.22	0.19	0.17	0.25	0.020	6643929
Benzo(k)fluoranthene	mg/kg	0.27	0.15	0.080	0.067	0.054	0.087	0.020	6643929
Benzo(a)pyrene	mg/kg	0.61	0.40	0.18	0.14	0.12	0.19	0.020	6643929
Indeno(1,2,3-cd)pyrene	mg/kg	0.34	0.20	0.11	0.092	0.080	0.12	0.050	6643929
Dibenz(a,h)anthracene	mg/kg	0.075	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6643929
Benzo(g,h,i)perylene	mg/kg	0.34	0.21	0.12	0.097	0.086	0.13	0.050	6643929
Low Molecular Weight PAH`s	mg/kg	2.5	2.7	0.64	0.38	0.46	0.61	0.050	6627454
High Molecular Weight PAH`s	mg/kg	7.3	4.5	2.0	1.6	1.5	2.2	0.050	6627454
Total PAH	mg/kg	9.7	7.2	2.7	2.0	1.9	2.8	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	91	83	96	82	89	93		6643929
D8-ACENAPHTHYLENE (sur.)	%	90	83	91	79	86	88		6643929
D8-NAPHTHALENE (sur.)	%	88	82	89	78	85	86		6643929
TERPHENYL-D14 (sur.)	%	95	88	98	85	92	95		6643929

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU4523		FU4524	FU4525		FU4526		
Sampling Date		2013/03/05		2013/03/05	2013/03/05		2013/03/05		
	UNITS	**SP13-85-130305**	**RDL**	**SP13-86-130305**	**SP13-87-130305**	**RDL**	**SP13-88-130305**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	4.8	0.10	4.0	4.1	0.10	4.9	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.38	0.10	0.33	0.33	0.10	0.41	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.058	0.010	0.069	0.069	0.010	0.034	0.010	6643929
2-Methylnaphthalene	mg/kg	0.059	0.020	0.038	0.038	0.020	0.032	0.020	6643929
Acenaphthylene	mg/kg	0.034	0.0050	<0.034(1)	<0.034(1)	0.034	0.045	0.0050	6643929
Acenaphthene	mg/kg	0.10	0.0050	0.042	0.042	0.0050	0.044	0.0050	6643929
Fluorene	mg/kg	0.12	0.020	0.043	0.044	0.020	0.048	0.020	6643929
Phenanthrene	mg/kg	0.62	0.020	0.31	0.31	0.020	0.33	0.020	6643929
Anthracene	mg/kg	0.17	0.0040	0.073	0.074	0.0040	0.11	0.0040	6643929
Fluoranthene	mg/kg	0.69	0.020	0.50	0.50	0.020	0.56	0.020	6643929
Pyrene	mg/kg	0.55	0.020	0.44	0.45	0.020	0.52	0.020	6643929
Benzo(a)anthracene	mg/kg	0.26	0.020	0.19	0.20	0.020	0.25	0.020	6643929
Chrysene	mg/kg	0.29	0.020	0.24	0.25	0.020	0.28	0.020	6643929
Benzo(b&j)fluoranthene	mg/kg	0.34	0.020	0.31	0.31	0.020	0.36	0.020	6643929
Benzo(k)fluoranthene	mg/kg	0.12	0.020	0.10	0.10	0.020	0.12	0.020	6643929
Benzo(a)pyrene	mg/kg	0.26	0.020	0.22	0.23	0.020	0.29	0.020	6643929
Indeno(1,2,3-cd)pyrene	mg/kg	0.16	0.050	0.15	0.15	0.050	0.18	0.050	6643929
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	<0.050	0.050	<0.050	0.050	6643929
Benzo(g,h,i)perylene	mg/kg	0.15	0.050	0.15	0.15	0.050	0.18	0.050	6643929
Low Molecular Weight PAH`s	mg/kg	1.2	0.050	0.57	0.58	0.050	0.64	0.050	6627454
High Molecular Weight PAH`s	mg/kg	3.0	0.050	2.5	2.5	0.050	3.0	0.050	6627454
Total PAH	mg/kg	4.2	0.050	3.1	3.1	0.050	3.6	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	93		90	92		93		6643929
D8-ACENAPHTHYLENE (sur.)	%	90		84	84		90		6643929
D8-NAPHTHALENE (sur.)	%	88		84	84		88		6643929
TERPHENYL-D14 (sur.)	%	96		92	94		96		6643929

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU4527		FU4528		FU4529		FV0705		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/04		
	UNITS	**SP13-89-130305**	**RDL**	**SP13-90-130305**	**RDL**	**SP13-90-01-130305**	**QC Batch**	**SP13-68-130304**	**RDL**	**QC Batch**
Calculated Parameters										
Index of Additive Cancer Risk(IARC)	N/A	19	0.10	7.2	0.10	3.7	6628524	3.5	0.10	6632304
Benzo[a]pyrene equivalency	N/A	1.6	0.10	0.76	0.10	0.31	6628524	0.29	0.10	6632304
Polycyclic Aromatics										
Naphthalene	mg/kg	0.91	0.010	0.12(1)	0.10	0.041	6643812	0.041	0.010	6643812
2-Methylnaphthalene	mg/kg	0.70	0.020	<0.20(1)	0.20	0.035	6643812	0.048	0.020	6643812
Acenaphthylene	mg/kg	0.053	0.0050	<0.050(1)	0.050	0.040	6643812	0.032	0.0050	6643812
Acenaphthene	mg/kg	1.1	0.0050	0.17(1)	0.050	0.043	6643812	0.049	0.0050	6643812
Fluorene	mg/kg	1.2	0.020	0.20(1)	0.20	0.046	6643812	0.057	0.020	6643812
Phenanthrene	mg/kg	5.1	0.020	1.1(1)	0.20	0.32	6643812	0.35	0.020	6643812
Anthracene	mg/kg	1.6	0.0040	0.33(1)	0.040	0.081	6643812	0.095	0.0040	6643812
Fluoranthene	mg/kg	3.7	0.020	0.99(1)	0.20	0.42	6643812	0.48	0.020	6643812
Pyrene	mg/kg	3.2	0.020	0.96(1)	0.20	0.43	6643812	0.46	0.020	6643812
Benzo(a)anthracene	mg/kg	1.3	0.020	0.39(1)	0.20	0.18	6643812	0.19	0.020	6643812
Chrysene	mg/kg	1.3	0.020	0.53(1)	0.20	0.23	6643812	0.23	0.020	6643812
Benzo(b&j)fluoranthene	mg/kg	1.2	0.020	0.47(1)	0.20	0.27	6643812	0.25	0.020	6643812
Benzo(k)fluoranthene	mg/kg	0.44	0.020	<0.20(1)	0.20	0.090	6643812	0.091	0.020	6643812
Benzo(a)pyrene	mg/kg	1.1	0.020	0.38(1)	0.20	0.22	6643812	0.20	0.020	6643812
Indeno(1,2,3-cd)pyrene	mg/kg	0.48	0.050	<0.50(1)	0.50	0.13	6643812	0.11	0.050	6643812
Dibenz(a,h)anthracene	mg/kg	0.17	0.050	<0.50(1)	0.50	<0.050	6643812	<0.050	0.050	6643812
Benzo(g,h,i)perylene	mg/kg	0.44	0.050	<0.50(1)	0.50	0.14	6643812	0.12	0.050	6643812
Low Molecular Weight PAH`s	mg/kg	11	0.050	1.9	0.50	0.60	6627454	0.67	0.050	6631776
High Molecular Weight PAH`s	mg/kg	14	0.050	4.0	0.50	2.3	6627454	2.3	0.050	6631776
Total PAH	mg/kg	25	0.050	5.9	0.50	2.9	6627454	3.0	0.050	6631776
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	91		94		95	6643812	105		6643812
D8-ACENAPHTHYLENE (sur.)	%	88		84		90	6643812	100		6643812
D8-NAPHTHALENE (sur.)	%	89		86		91	6643812	100		6643812
TERPHENYL-D14 (sur.)	%	94		94		97	6643812	107		6643812

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0706			FV0707	FV0708		
Sampling Date		2013/03/04			2013/03/04	2013/03/04		
	UNITS	**SP13-69-130304**	**RDL**	**QC Batch**	**SP13-70-130304**	**SP13-71-130304**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	3.5	0.10	6632304	1.1	1.8	0.10	6632304
Benzo[a]pyrene equivalency	N/A	0.29	0.10	6632304	<0.10	0.15	0.10	6632304
Polycyclic Aromatics								
Naphthalene	mg/kg	0.029	0.010	6644425	<0.010	0.038	0.010	6643812
2-Methylnaphthalene	mg/kg	0.027	0.020	6644425	<0.020	0.024	0.020	6643812
Acenaphthylene	mg/kg	0.023	0.0050	6644425	0.0088	0.0097	0.0050	6643812
Acenaphthene	mg/kg	0.040	0.0050	6644425	0.0061	0.016	0.0050	6643812
Fluorene	mg/kg	0.042	0.020	6644425	<0.020	<0.020	0.020	6643812
Phenanthrene	mg/kg	0.27	0.020	6644425	0.057	0.21	0.020	6643812
Anthracene	mg/kg	0.085	0.0040	6644425	0.014	0.014	0.0040	6643812
Fluoranthene	mg/kg	0.40	0.020	6644425	0.12	0.25	0.020	6643812
Pyrene	mg/kg	0.41	0.020	6644425	0.11	0.22	0.020	6643812
Benzo(a)anthracene	mg/kg	0.22	0.020	6644425	0.047	0.059	0.020	6643812
Chrysene	mg/kg	0.26	0.020	6644425	0.061	0.12	0.020	6643812
Benzo(b&j)fluoranthene	mg/kg	0.24	0.020	6644425	0.073	0.14	0.020	6643812
Benzo(k)fluoranthene	mg/kg	0.089	0.020	6644425	0.026	0.045	0.020	6643812
Benzo(a)pyrene	mg/kg	0.19	0.020	6644425	0.053	0.091	0.020	6643812
Indeno(1,2,3-cd)pyrene	mg/kg	0.10	0.050	6644425	<0.050	0.060	0.050	6643812
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	6644425	<0.050	<0.050	0.050	6643812
Benzo(g,h,i)perylene	mg/kg	0.12	0.050	6644425	<0.050	0.063	0.050	6643812
Low Molecular Weight PAH`s	mg/kg	0.52	0.020	6631776	0.086	0.31	0.050	6631776
High Molecular Weight PAH`s	mg/kg	2.2	0.050	6631776	0.53	1.1	0.050	6631776
Total PAH	mg/kg	2.7	0.050	6631776	0.62	1.5	0.050	6631776
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	102		6644425	95	97		6643812
D8-ACENAPHTHYLENE (sur.)	%	94		6644425	90	93		6643812
D8-NAPHTHALENE (sur.)	%	94		6644425	89	93		6643812
TERPHENYL-D14 (sur.)	%	103		6644425	97	99		6643812

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0709			FV0711	FV0711		
Sampling Date		2013/03/04			2013/03/04	2013/03/04		
	UNITS	**SP13-72-130304**	**RDL**	**QC Batch**	**SP13-73-130304**	**SP13-73-130304 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	3.1	0.10	6632304	2.6		0.10	6632304
Benzo[a]pyrene equivalency	N/A	0.41	0.10	6632304	0.22		0.10	6632304
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.10(1)	0.10	6643812	0.032	0.026	0.010	6643929
2-Methylnaphthalene	mg/kg	<0.20(1)	0.20	6643812	0.021	<0.020	0.020	6643929
Acenaphthylene	mg/kg	<0.050(1)	0.050	6643812	0.024	0.025	0.0050	6643929
Acenaphthene	mg/kg	<0.050(1)	0.050	6643812	0.021	0.022	0.0050	6643929
Fluorene	mg/kg	<0.20(1)	0.20	6643812	0.023	0.025	0.020	6643929
Phenanthrene	mg/kg	0.25(1)	0.20	6643812	0.17	0.17	0.020	6643929
Anthracene	mg/kg	0.072(1)	0.040	6643812	0.039	0.039	0.0040	6643929
Fluoranthene	mg/kg	0.32(1)	0.20	6643812	0.28	0.27	0.020	6643929
Pyrene	mg/kg	0.32(1)	0.20	6643812	0.27	0.25	0.020	6643929
Benzo(a)anthracene	mg/kg	<0.20(1)	0.20	6643812	0.11	0.095	0.020	6643929
Chrysene	mg/kg	<0.20(1)	0.20	6643812	0.15	0.13	0.020	6643929
Benzo(b&j)fluoranthene	mg/kg	<0.20(1)	0.20	6643812	0.20	0.18	0.020	6643929
Benzo(k)fluoranthene	mg/kg	<0.20(1)	0.20	6643812	0.064	0.056	0.020	6643929
Benzo(a)pyrene	mg/kg	<0.20(1)	0.20	6643812	0.15	0.12	0.020	6643929
Indeno(1,2,3-cd)pyrene	mg/kg	<0.50(1)	0.50	6643812	0.095	0.085	0.050	6643929
Dibenz(a,h)anthracene	mg/kg	<0.50(1)	0.50	6643812	<0.050	<0.050	0.050	6643929
Benzo(g,h,i)perylene	mg/kg	<0.50(1)	0.50	6643812	0.10	0.091	0.050	6643929
Low Molecular Weight PAH`s	mg/kg	<0.50	0.50	6631776	0.33		0.050	6631776
High Molecular Weight PAH`s	mg/kg	0.64	0.50	6631776	1.5		0.050	6631776
Total PAH	mg/kg	0.96	0.50	6631776	1.9		0.050	6631776
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	100		6643812	90	88		6643929
D8-ACENAPHTHYLENE (sur.)	%	91		6643812	87	83		6643929
D8-NAPHTHALENE (sur.)	%	92		6643812	86	82		6643929
TERPHENYL-D14 (sur.)	%	99		6643812	93	91		6643929

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PAH IN LEACHATE BY GC-MS (SOIL)

Maxxam ID		FU4527		
Sampling Date		2013/03/05		
	UNITS	**SP13-89-130305**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Leachate Low Molecular Weight PAH`s	ug/L	<0.50	0.50	6653313
Leachate High Molecular Weight PAH`s	ug/L	<0.20	0.20	6653313
Leachate Total PAH	ug/L	<0.50	0.50	6653313
Leachate Benzo(a)pyrene	ug/L	<0.10	0.10	6666553
Surrogate Recovery (%)				
Leachate D10-ANTHRACENE (sur.)	%	88		6666553
Leachate D8-ACENAPHTHYLENE (sur.)	%	84		6666553
Leachate D8-NAPHTHALENE (sur.)	%	83		6666553
Leachate TERPHENYL-D14 (sur.)	%	91		6666553

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU4511	FU4512		FU4513	FU4514			FU4515		
Sampling Date		2013/03/05	2013/03/05		2013/03/05	2013/03/05			2013/03/05		
	UNITS	**SP13-74-130305**	**SP13-75-130305**	**RDL**	**SP13-76-130305**	**SP13-77-130305**	**RDL**	**QC Batch**	**SP13-78-130305**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	61	77	10	61	92	10	6641235	59	10	6643800
Soluble Chloride (Cl)	mg/L	25.8	36.1	5.0	35.2	44.5	5.0	6641223	50.6	5.0	6643798
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	10.4	14.1	2.0	13.7	17.2	1.9	6628526	18.6	1.8	6628526
Soluble Sodium (Na)	mg/kg	18.9	20.8	2.0	17.5	21.9	1.9	6628526	20.5	1.8	6628526
Soluble Parameters											
Soluble Conductivity	uS/cm	427	519	1.0	429	567	1.0	6636600	499	1.0	6639970
Soluble pH	pH Units	6.87	7.25	N/A	7.05	7.28	N/A	6636598	7.27	N/A	6639969
Wet Soluble Calcium (Ca)	mg/L	43.0	61.1	5.0	58.3	66.6	5.0	6639930	50.5	5.0	6643803
Saturation %	%	40.1	39.1	1.0	38.8	38.7	1.0	6636590	36.9	1.0	6639968
Wet Soluble Magnesium (Mg)	mg/L	14.3	16.0	5.0	13.0	15.1	5.0	6639930	21.0	5.0	6643803
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	<20	20	6639930	<20	20	6643803
Wet Soluble Sodium (Na)	mg/L	47.0	53.2	5.0	45.1	56.5	5.0	6639930	55.5	5.0	6643803
Wet Soluble Sulphur (S)	mg/L	<30	34	30	<30	40	30	6639930	32	30	6643803
Sodium Adsorption Ratio	N/A	1.59	1.57	0.10	1.39	1.63	0.10	6628525	1.66	0.10	6628525

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU4516		FU4517		FU4518		FU4519	FU4520		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/05	2013/03/05		
	UNITS	**SP13-79-130305**	**RDL**	**SP13-79-01-130305**	**RDL**	**SP13-80-130305**	**RDL**	**SP13-81-130305**	**SP13-82-130305**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	104	10	54	10	109	10	113	76	10	6643800
Soluble Chloride (Cl)	mg/L	46.6	5.0	41.6	5.0	44.7	5.0	47.1	30.6	5.0	6643798
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	18.4	2.0	17.2	2.1	16.3	1.8	18.2	11.5	1.9	6628526
Soluble Sodium (Na)	mg/kg	22.9	2.0	19.8	2.1	21.2	1.8	21.1	16.4	1.9	6628526
Soluble Parameters											
Soluble Conductivity	uS/cm	559	1.0	472	1.0	551	1.0	578	415	1.0	6639970
Soluble pH	pH Units	7.21	N/A	7.25	N/A	7.31	N/A	7.24	7.17	N/A	6639969
Wet Soluble Calcium (Ca)	mg/L	68.2	5.0	54.6	5.0	64.8	5.0	73.5	49.6	5.0	6643803
Saturation %	%	39.4	1.0	41.2	1.0	36.5	1.0	38.7	37.6	1.0	6639968
Wet Soluble Magnesium (Mg)	mg/L	26.3	5.0	19.7	5.0	23.1	5.0	22.7	21.7	5.0	6643803
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6643803
Wet Soluble Sodium (Na)	mg/L	58.2	5.0	48.1	5.0	58.1	5.0	54.5	43.7	5.0	6643803
Wet Soluble Sulphur (S)	mg/L	40	30	<30	30	41	30	44	<30	30	6643803
Sodium Adsorption Ratio	N/A	1.52	0.10	1.42	0.10	1.58	0.10	1.42	1.30	0.10	6628525

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU4521		FU4522		FU4523	FU4524	FU4524		
Sampling Date		2013/03/05		2013/03/05		2013/03/05	2013/03/05	2013/03/05		
	UNITS	**SP13-83-130305**	**RDL**	**SP13-84-130305**	**RDL**	**SP13-85-130305**	**SP13-86-130305**	**SP13-86-130305 Lab-Dup**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	55	10	69	10	25	125	115	10	6643800
Soluble Chloride (Cl)	mg/L	37.7	5.0	42.5	5.0	42.1	48.0	43.8	5.0	6643798
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	14.5	1.9	17.6	2.1	15.7	18.4		1.9	6628526
Soluble Sodium (Na)	mg/kg	19.0	1.9	20.3	2.1	16.8	22.5		1.9	6628526
Soluble Parameters										
Soluble Conductivity	uS/cm	424	1.0	518	1.0	471	635	593	1.0	6639970
Soluble pH	pH Units	7.27	N/A	7.29	N/A	7.29	7.19	7.24	N/A	6639969
Wet Soluble Calcium (Ca)	mg/L	49.6	5.0	63.2	5.0	53.5	77.5	68.9	5.0	6643803
Saturation %	%	38.5	1.0	41.3	1.0	37.2	38.4	38.3	1.0	6639968
Wet Soluble Magnesium (Mg)	mg/L	22.6	5.0	22.6	5.0	16.0	30.0	25.6	5.0	6643803
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	<20	20	6643803
Wet Soluble Sodium (Na)	mg/L	49.3	5.0	49.2	5.0	45.2	58.4	52.4	5.0	6643803
Wet Soluble Sulphur (S)	mg/L	<30	30	34	30	31	49	45	30	6643803
Sodium Adsorption Ratio	N/A	1.46	0.10	1.35	0.10	1.39	1.43		0.10	6628525

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU4525		FU4526		FU4527		FU4528		
Sampling Date		2013/03/05		2013/03/05		2013/03/05		2013/03/05		
	UNITS	**SP13-87-130305**	**RDL**	**SP13-88-130305**	**RDL**	**SP13-89-130305**	**RDL**	**SP13-90-130305**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	102	10	59	10	60	10	146	10	6643800
Soluble Chloride (Cl)	mg/L	33.8	5.0	27.7	5.0	28.4	5.0	44.7	5.0	6643798
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	15.1	2.2	15.0	2.7	14.5	2.5	15.2	1.7	6628526
Soluble Sodium (Na)	mg/kg	21.5	2.2	20.5	2.7	18.7	2.5	18.2	1.7	6628526
Soluble Parameters										
Soluble Conductivity	uS/cm	517	1.0	426	1.0	430	1.0	620	1.0	6639970
Soluble pH	pH Units	7.36	N/A	7.54	N/A	7.36	N/A	7.31	N/A	6639969
Wet Soluble Calcium (Ca)	mg/L	63.1	5.0	51.3	5.0	56.0	5.0	74.4	5.0	6643803
Saturation %	%	44.7	1.0	54.2	1.0	50.9	1.0	34.1	1.0	6639968
Wet Soluble Magnesium (Mg)	mg/L	21.0	5.0	15.4	5.0	15.9	5.0	30.2	5.0	6643803
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6643803
Wet Soluble Sodium (Na)	mg/L	48.0	5.0	37.9	5.0	36.6	5.0	53.3	5.0	6643803
Wet Soluble Sulphur (S)	mg/L	40	30	<30	30	<30	30	58	30	6643803
Sodium Adsorption Ratio	N/A	1.34	0.10	1.19	0.10	1.11	0.10	1.32	0.10	6628525

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU4529			FV0705		FV0706		
Sampling Date		2013/03/05			2013/03/04		2013/03/04		
	UNITS	**SP13-90-01-130305**	**RDL**	**QC Batch**	**SP13-68-130304**	**RDL**	**SP13-69-130304**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	125	10	6643800	123	10	179	10	6648234
Soluble Chloride (Cl)	mg/L	35.8	5.0	6643798	57.4	5.0	44.2	5.0	6648232
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	17.8	2.5	6628526	21.7	1.9	16.0	1.8	6633675
Soluble Sodium (Na)	mg/kg	23.8	2.5	6628526	17.4	1.9	11.2	1.8	6633675
Soluble Parameters									
Soluble Conductivity	uS/cm	541	1.0	6639970	529	1.0	615	1.0	6643866
Soluble pH	pH Units	7.45	N/A	6639969	6.95	N/A	7.10	N/A	6643865
Wet Soluble Calcium (Ca)	mg/L	71.6	5.0	6643803	65.3	5.0	86.4	5.0	6647338
Saturation %	%	49.6	1.0	6639968	37.9	1.0	36.1	1.0	6643862
Wet Soluble Magnesium (Mg)	mg/L	29.7	5.0	6643803	20.7	5.0	20.5	5.0	6647338
Wet Soluble Potassium (K)	mg/L	<20	20	6643803	<20	20	<20	20	6647338
Wet Soluble Sodium (Na)	mg/L	48.0	5.0	6643803	45.9	5.0	31.1	5.0	6647338
Wet Soluble Sulphur (S)	mg/L	48	30	6643803	42	30	64	30	6647338
Sodium Adsorption Ratio	N/A	1.20	0.10	6628525	1.27	0.10	0.78	0.10	6633674

N/A = Not Applicable
RDL = Reportable Detection Limit

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SNC LAVALIN ENVIRONMENT INC.
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Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV0707	FV0708		FV0709		FV0711		
Sampling Date		2013/03/04	2013/03/04		2013/03/04		2013/03/04		
	UNITS	**SP13-70-130304**	**SP13-71-130304**	**RDL**	**SP13-72-130304**	**RDL**	**SP13-73-130304**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	31	41	10	85	10	130	10	6648234
Soluble Chloride (Cl)	mg/L	29.7	18.4	5.0	30.2	5.0	32.2	5.0	6648232
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	11.3	6.9	1.9	11.8	2.0	11.7	1.8	6633675
Soluble Sodium (Na)	mg/kg	8.4	6.9	1.9	10.1	2.0	9.9	1.8	6633675
Soluble Parameters									
Soluble Conductivity	uS/cm	378	346	1.0	442	1.0	529	1.0	6643866
Soluble pH	pH Units	6.92	6.92	N/A	7.10	N/A	7.01	N/A	6643865
Wet Soluble Calcium (Ca)	mg/L	62.7	57.6	5.0	64.3	5.0	73.4	5.0	6647338
Saturation %	%	38.2	37.6	1.0	39.1	1.0	36.2	1.0	6643862
Wet Soluble Magnesium (Mg)	mg/L	21.1	23.9	5.0	21.8	5.0	23.7	5.0	6647338
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	20	<20	20	6647338
Wet Soluble Sodium (Na)	mg/L	22.0	18.2	5.0	25.8	5.0	27.4	5.0	6647338
Wet Soluble Sulphur (S)	mg/L	<30	<30	30	33	30	47	30	6647338
Sodium Adsorption Ratio	N/A	0.61	0.51	0.10	0.71	0.10	0.71	0.10	6633674

N/A = Not Applicable
RDL = Reportable Detection Limit

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Package 1	1.7°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - additional analysis has been completed as per clients' email request. KD4 - March 21/13

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6630948	Moisture	2013/03/09					<0.30	%	6.7	20		
6631417	Total Antimony (Sb)	2013/03/08	105	75 - 125	96	75 - 125	<0.10	mg/kg			94	70 - 130
6631417	Total Arsenic (As)	2013/03/08	108	75 - 125	99	75 - 125	<0.50	mg/kg			99	70 - 130
6631417	Total Barium (Ba)	2013/03/08	NC	75 - 125	101	75 - 125	<0.10	mg/kg			103	70 - 130
6631417	Total Beryllium (Be)	2013/03/08	113	75 - 125	93	75 - 125	<0.40	mg/kg				
6631417	Total Cadmium (Cd)	2013/03/08	109	75 - 125	101	75 - 125	<0.050	mg/kg			104	70 - 130
6631417	Total Chromium (Cr)	2013/03/08	106	75 - 125	100	75 - 125	<1.0	mg/kg			97	70 - 130
6631417	Total Cobalt (Co)	2013/03/08	103	75 - 125	100	75 - 125	<0.30	mg/kg			94	70 - 130
6631417	Total Copper (Cu)	2013/03/08	NC	75 - 125	106	75 - 125	<0.50	mg/kg	0.8	30	88	70 - 130
6631417	Total Lead (Pb)	2013/03/08	NC	75 - 125	103	75 - 125	<0.10	mg/kg			100	70 - 130
6631417	Total Lithium (Li)	2013/03/08	106	75 - 125	95	75 - 125	<5.0	mg/kg				
6631417	Total Manganese (Mn)	2013/03/08	NC	75 - 125	100	75 - 125	<0.20	mg/kg			99	70 - 130
6631417	Total Mercury (Hg)	2013/03/08	107	75 - 125	98	75 - 125	<0.050	mg/kg			87	70 - 130
6631417	Total Molybdenum (Mo)	2013/03/08	113	75 - 125	102	75 - 125	<0.10	mg/kg			114	70 - 130
6631417	Total Nickel (Ni)	2013/03/08	103	75 - 125	103	75 - 125	<0.80	mg/kg			92	70 - 130
6631417	Total Selenium (Se)	2013/03/08	121	75 - 125	102	75 - 125	<0.50	mg/kg				
6631417	Total Silver (Ag)	2013/03/08	100	75 - 125	98	75 - 125	<0.050	mg/kg				
6631417	Total Strontium (Sr)	2013/03/08	NC	75 - 125	96	75 - 125	<0.10	mg/kg			99	70 - 130
6631417	Total Thallium (Tl)	2013/03/08	102	75 - 125	102	75 - 125	<0.050	mg/kg			91	70 - 130
6631417	Total Tin (Sn)	2013/03/08	95	75 - 125	97	75 - 125	<0.10	mg/kg				
6631417	Total Titanium (Ti)	2013/03/08	NC	75 - 125	100	75 - 125	<1.0	mg/kg			106	70 - 130
6631417	Total Uranium (U)	2013/03/08	104	75 - 125	99	75 - 125	<0.050	mg/kg			96	70 - 130
6631417	Total Vanadium (V)	2013/03/08	NC	75 - 125	98	75 - 125	<2.0	mg/kg			103	70 - 130
6631417	Total Zinc (Zn)	2013/03/08	NC	75 - 125	108	75 - 125	<1.0	mg/kg	0.5	30	94	70 - 130
6631417	Total Aluminum (Al)	2013/03/08					<100	mg/kg			98	70 - 130
6631417	Total Calcium (Ca)	2013/03/08					<100	mg/kg			97	70 - 130
6631417	Total Iron (Fe)	2013/03/08					<100	mg/kg			95	70 - 130
6631417	Total Magnesium (Mg)	2013/03/08					<100	mg/kg			94	70 - 130
6631417	Total Phosphorus (P)	2013/03/08					<10	mg/kg			98	70 - 130
6631417	Total Bismuth (Bi)	2013/03/08					<0.10	mg/kg				
6631417	Total Potassium (K)	2013/03/08					<100	mg/kg				
6631417	Total Sodium (Na)	2013/03/08					<100	mg/kg				
6631417	Total Zirconium (Zr)	2013/03/08					<0.50	mg/kg				
6631427	Soluble (2:1) pH	2013/03/08			102	96 - 104			1	20		
6631434	Total Antimony (Sb)	2013/03/08	NC	75 - 125	99	75 - 125	<0.10	mg/kg	0.6	30	91	70 - 130
6631434	Total Arsenic (As)	2013/03/08	NC	75 - 125	102	75 - 125	<0.50	mg/kg	1.7	30	97	70 - 130
6631434	Total Barium (Ba)	2013/03/08	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.9	35	105	70 - 130
6631434	Total Beryllium (Be)	2013/03/08	101	75 - 125	94	75 - 125	<0.40	mg/kg	NC	30		
6631434	Total Cadmium (Cd)	2013/03/08	107	75 - 125	104	75 - 125	<0.050	mg/kg	1.5	30	101	70 - 130

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6631434	Total Chromium (Cr)	2013/03/08	NC	75 - 125	101	75 - 125	<1.0	mg/kg	1	30	99	70 - 130
6631434	Total Cobalt (Co)	2013/03/08	95	75 - 125	103	75 - 125	<0.30	mg/kg	0.7	30	93	70 - 130
6631434	Total Copper (Cu)	2013/03/08	NC	75 - 125	105	75 - 125	<0.50	mg/kg	4.3	30	90	70 - 130
6631434	Total Lead (Pb)	2013/03/08	NC	75 - 125	104	75 - 125	<0.10	mg/kg	2.8	35	99	70 - 130
6631434	Total Lithium (Li)	2013/03/08	103	75 - 125	97	75 - 125	<5.0	mg/kg	NC	30		
6631434	Total Manganese (Mn)	2013/03/08	NC	75 - 125	102	75 - 125	<0.20	mg/kg	1.3	30	100	70 - 130
6631434	Total Mercury (Hg)	2013/03/08	119	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35	97	70 - 130
6631434	Total Molybdenum (Mo)	2013/03/08	108	75 - 125	102	75 - 125	<0.10	mg/kg	1.9	35	113	70 - 130
6631434	Total Nickel (Ni)	2013/03/08	NC	75 - 125	106	75 - 125	<0.80	mg/kg	2.3	30	90	70 - 130
6631434	Total Selenium (Se)	2013/03/08	117	75 - 125	101	75 - 125	<0.50	mg/kg	NC	30		
6631434	Total Silver (Ag)	2013/03/08	97	75 - 125	92	75 - 125	<0.050	mg/kg	NC	35		
6631434	Total Strontium (Sr)	2013/03/08	NC	75 - 125	99	75 - 125	<0.10	mg/kg	2.3	35	101	70 - 130
6631434	Total Thallium (Tl)	2013/03/08	100	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	90	70 - 130
6631434	Total Tin (Sn)	2013/03/08	NC	75 - 125	97	75 - 125	<0.10	mg/kg	6.0	35		
6631434	Total Titanium (Ti)	2013/03/08	NC	75 - 125	99	75 - 125	<1.0	mg/kg	1.7	35	107	70 - 130
6631434	Total Uranium (U)	2013/03/08	106	75 - 125	100	75 - 125	<0.050	mg/kg	7.0	30	90	70 - 130
6631434	Total Vanadium (V)	2013/03/08	NC	75 - 125	103	75 - 125	<2.0	mg/kg	0.03	30	105	70 - 130
6631434	Total Zinc (Zn)	2013/03/08	NC	75 - 125	112	75 - 125	<1.0	mg/kg	2.6	30	96	70 - 130
6631434	Total Aluminum (Al)	2013/03/08					<100	mg/kg	1.3	35	101	70 - 130
6631434	Total Calcium (Ca)	2013/03/08					<100	mg/kg	0.7	30	98	70 - 130
6631434	Total Iron (Fe)	2013/03/08					<100	mg/kg	1.9	30	95	70 - 130
6631434	Total Magnesium (Mg)	2013/03/08					<100	mg/kg	1.8	30	96	70 - 130
6631434	Total Phosphorus (P)	2013/03/08					<10	mg/kg	2.8	30	98	70 - 130
6631434	Total Bismuth (Bi)	2013/03/08					<0.10	mg/kg	NC	30		
6631434	Total Potassium (K)	2013/03/08					<100	mg/kg	2.6	35		
6631434	Total Sodium (Na)	2013/03/08					<100	mg/kg	NC	35		
6631434	Total Zirconium (Zr)	2013/03/08					<0.50	mg/kg	3.6	30		
6631484	Soluble (2:1) pH	2013/03/08			102	96 - 104			1.5	20		
6635064	Total Antimony (Sb)	2013/03/11	104	75 - 125	105	75 - 125	<0.10	mg/kg	NC	30	99	70 - 130
6635064	Total Arsenic (As)	2013/03/11	110	75 - 125	106	75 - 125	0.57, RDL=0.50	mg/kg	10.3	30	96	70 - 130
6635064	Total Barium (Ba)	2013/03/11	NC	75 - 125	105	75 - 125	<0.10	mg/kg	0.2	35	102	70 - 130
6635064	Total Beryllium (Be)	2013/03/11	102	75 - 125	103	75 - 125	<0.40	mg/kg	NC	30		
6635064	Total Cadmium (Cd)	2013/03/11	114	75 - 125	109	75 - 125	<0.050	mg/kg	NC	30	100	70 - 130
6635064	Total Chromium (Cr)	2013/03/11	NC	75 - 125	105	75 - 125	<1.0	mg/kg	0.5	30	100	70 - 130
6635064	Total Cobalt (Co)	2013/03/11	103	75 - 125	105	75 - 125	<0.30	mg/kg	1.5	30	91	70 - 130
6635064	Total Copper (Cu)	2013/03/11	106	75 - 125	110	75 - 125	<0.50	mg/kg	0.9	30	86	70 - 130
6635064	Total Lead (Pb)	2013/03/11	105	75 - 125	107	75 - 125	<0.10	mg/kg	3.1	35	97	70 - 130
6635064	Total Lithium (Li)	2013/03/11	105	75 - 125	106	75 - 125	<5.0	mg/kg				
6635064	Total Manganese (Mn)	2013/03/11	NC	75 - 125	108	75 - 125	<0.20	mg/kg	0.3	30	102	70 - 130

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Client Project #: 511828
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Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6635064	Total Mercury (Hg)	2013/03/11	114	75 - 125	106	75 - 125	<0.050	mg/kg	NC	35	86	70 - 130
6635064	Total Molybdenum (Mo)	2013/03/11	110	75 - 125	109	75 - 125	<0.10	mg/kg	NC	35	105	70 - 130
6635064	Total Nickel (Ni)	2013/03/11	NC	75 - 125	107	75 - 125	<0.80	mg/kg	2.4	30	92	70 - 130
6635064	Total Selenium (Se)	2013/03/11	126(1)	75 - 125	114	75 - 125	<0.50	mg/kg	NC	30		
6635064	Total Silver (Ag)	2013/03/11	98	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35		
6635064	Total Strontium (Sr)	2013/03/11	111	75 - 125	108	75 - 125	<0.10	mg/kg	1.2	35	106	70 - 130
6635064	Total Thallium (Tl)	2013/03/11	104	75 - 125	105	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6635064	Total Tin (Sn)	2013/03/11	102	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
6635064	Total Titanium (Ti)	2013/03/11	NC	75 - 125	105	75 - 125	<1.0	mg/kg	0.3	35	105	70 - 130
6635064	Total Uranium (U)	2013/03/11	102	75 - 125	105	75 - 125	<0.050	mg/kg			94	70 - 130
6635064	Total Vanadium (V)	2013/03/11	NC	75 - 125	102	75 - 125	<2.0	mg/kg	0.2	30	106	70 - 130
6635064	Total Zinc (Zn)	2013/03/11	NC	75 - 125	118	75 - 125	<1.0	mg/kg	0.8	30	97	70 - 130
6635064	Total Aluminum (Al)	2013/03/11					<100	mg/kg	2.2	35	109	70 - 130
6635064	Total Calcium (Ca)	2013/03/11					<100	mg/kg	5.5	30	93	70 - 130
6635064	Total Iron (Fe)	2013/03/11					<100	mg/kg	0.8	30	92	70 - 130
6635064	Total Magnesium (Mg)	2013/03/11					<100	mg/kg	1.0	30	97	70 - 130
6635064	Total Phosphorus (P)	2013/03/11					<10	mg/kg	0.9	30	96	70 - 130
6635064	Total Bismuth (Bi)	2013/03/11					<0.10	mg/kg	NC	30		
6635064	Total Potassium (K)	2013/03/11					<100	mg/kg	NC	35		
6635064	Total Sodium (Na)	2013/03/11					<100	mg/kg	NC	35		
6635064	Total Zirconium (Zr)	2013/03/11					<0.50	mg/kg	0.02	30		
6635068	Soluble (2:1) pH	2013/03/11			102	96 - 104			0.8	20		
6635275	Total Antimony (Sb)	2013/03/11	94	75 - 125	97	75 - 125	<0.10	mg/kg	NC	30	92	70 - 130
6635275	Total Arsenic (As)	2013/03/11	108	75 - 125	101	75 - 125	0.72, RDL=0.50	mg/kg	2.0	30	97	70 - 130
6635275	Total Barium (Ba)	2013/03/11	NC	75 - 125	106	75 - 125	<0.10	mg/kg	0.3	35	104	70 - 130
6635275	Total Beryllium (Be)	2013/03/11	120	75 - 125	107	75 - 125	<0.40	mg/kg	NC	30		
6635275	Total Cadmium (Cd)	2013/03/11	114	75 - 125	103	75 - 125	<0.050	mg/kg	NC	30	94	70 - 130
6635275	Total Chromium (Cr)	2013/03/11	NC	75 - 125	102	75 - 125	<1.0	mg/kg	0.4	30	101	70 - 130
6635275	Total Cobalt (Co)	2013/03/11	109	75 - 125	103	75 - 125	<0.30	mg/kg	1.4	30	93	70 - 130
6635275	Total Copper (Cu)	2013/03/11	NC	75 - 125	105	75 - 125	<0.50	mg/kg	3.1	30	87	70 - 130
6635275	Total Lead (Pb)	2013/03/11	109	75 - 125	104	75 - 125	<0.10	mg/kg	4.3	35	98	70 - 130
6635275	Total Lithium (Li)	2013/03/11	110	75 - 125	101	75 - 125	<5.0	mg/kg				
6635275	Total Manganese (Mn)	2013/03/11	NC	75 - 125	102	75 - 125	<0.20	mg/kg	0.2	30	99	70 - 130
6635275	Total Mercury (Hg)	2013/03/11	109	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35	93	70 - 130
6635275	Total Molybdenum (Mo)	2013/03/11	108	75 - 125	102	75 - 125	<0.10	mg/kg	2.4	35	102	70 - 130
6635275	Total Nickel (Ni)	2013/03/11	108	75 - 125	104	75 - 125	<0.80	mg/kg	0.5	30	91	70 - 130
6635275	Total Selenium (Se)	2013/03/11	123	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30		
6635275	Total Silver (Ag)	2013/03/11	104	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35		
6635275	Total Strontium (Sr)	2013/03/11	NC	75 - 125	102	75 - 125	<0.10	mg/kg	0.6	35	103	70 - 130

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Maxxam Job #: B317896
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6635275	Total Thallium (Tl)	2013/03/11	108	75 - 125	104	75 - 125	<0.050	mg/kg			88	70 - 130
6635275	Total Tin (Sn)	2013/03/11	97	75 - 125	97	75 - 125	<0.10	mg/kg	25.0	35		
6635275	Total Titanium (Ti)	2013/03/11	NC	75 - 125	99	75 - 125	<1.0	mg/kg	0.2	35	101	70 - 130
6635275	Total Uranium (U)	2013/03/11	106	75 - 125	102	75 - 125	<0.050	mg/kg			96	70 - 130
6635275	Total Vanadium (V)	2013/03/11	NC	75 - 125	100	75 - 125	<2.0	mg/kg	0.2	30	106	70 - 130
6635275	Total Zinc (Zn)	2013/03/11	NC	75 - 125	107	75 - 125	<1.0	mg/kg	0.6	30	94	70 - 130
6635275	Total Aluminum (Al)	2013/03/11					<100	mg/kg	0.4	35	104	70 - 130
6635275	Total Calcium (Ca)	2013/03/11					<100	mg/kg			95	70 - 130
6635275	Total Iron (Fe)	2013/03/11					<100	mg/kg			95	70 - 130
6635275	Total Magnesium (Mg)	2013/03/11					<100	mg/kg			95	70 - 130
6635275	Total Phosphorus (P)	2013/03/11					<10	mg/kg			93	70 - 130
6635275	Total Bismuth (Bi)	2013/03/11					<0.10	mg/kg				
6635275	Total Potassium (K)	2013/03/11					<100	mg/kg				
6635275	Total Sodium (Na)	2013/03/11					<100	mg/kg				
6635275	Total Zirconium (Zr)	2013/03/11					<0.50	mg/kg				
6635277	Soluble (2:1) pH	2013/03/11			102	96 - 104			0.4	20		
6636197	Moisture	2013/03/12					<0.30	%	2.8	20		
6636250	Moisture	2013/03/12					<0.30	%	9.6	20		
6636321	Moisture	2013/03/12					<0.30	%	3.1	20		
6636590	Saturation %	2013/03/11			104	80 - 120	<1.0	%	1.2	30		
6636598	Soluble pH	2013/03/11			100	97 - 103			0.6	20		
6636600	Soluble Conductivity	2013/03/12			108	70 - 130	<1.0	uS/cm	0.2	35		
6638321	1,4-Difluorobenzene (sur.)	2013/03/11	95	70 - 130	110	70 - 130	98	%				
6638321	4-BROMOFLUOROBENZENE (sur.)	2013/03/11	101	70 - 130	101	70 - 130	99	%				
6638321	D10-ETHYLBENZENE (sur.)	2013/03/11	107	50 - 130	96	50 - 130	103	%				
6638321	D4-1,2-DICHLOROETHANE (sur.)	2013/03/11	103	70 - 130	103	70 - 130	102	%				
6638321	Benzene	2013/03/11	105	60 - 140	85	60 - 140	<0.0050	mg/kg	NC	40		
6638321	Toluene	2013/03/11	124	60 - 140	100	60 - 140	<0.020	mg/kg	NC	40		
6638321	Ethylbenzene	2013/03/11	121	60 - 140	97	60 - 140	<0.010	mg/kg	NC	40		
6638321	m & p-Xylene	2013/03/11	116	60 - 140	94	60 - 140	<0.040	mg/kg	NC	40		
6638321	o-Xylene	2013/03/11	120	60 - 140	98	60 - 140	<0.040	mg/kg	NC	40		
6638321	VH C6-C10	2013/03/11			107	60 - 140	<10	mg/kg				
6638321	(C6-C10)	2013/03/11			107	60 - 140	<10	mg/kg	NC	40		
6638321	Methyl-tert-butylether(MTBE)	2013/03/11					<0.10	mg/kg	NC	40		
6638321	Styrene	2013/03/11					<0.030	mg/kg	NC	40		
6638321	Xylenes (Total)	2013/03/11					<0.040	mg/kg	NC	40		
6639930	Wet Soluble Calcium (Ca)	2013/03/12					<5.0	mg/L	0.8	30		
6639930	Wet Soluble Magnesium (Mg)	2013/03/12					<5.0	mg/L	NC	30		
6639930	Wet Soluble Potassium (K)	2013/03/12					<20	mg/L	NC	30		

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			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6639930	Wet Soluble Sodium (Na)	2013/03/12					<5.0	mg/L	1.1	30		
6639930	Wet Soluble Sulphur (S)	2013/03/12					<30	mg/L	NC	30		
6639968	Saturation %	2013/03/12			104	80 - 120	<1.0	%	0.2	30		
6639969	Soluble pH	2013/03/12			100	97 - 103			0.7	20		
6639970	Soluble Conductivity	2013/03/12			110	70 - 130	<1.0	uS/cm	7.0	35		
6641223	Soluble Chloride (Cl)	2013/03/12					<5.0	mg/L	1.4	30		
6641235	Soluble Sulphate (SO4)	2013/03/12					<10	mg/L	0.5	30		
6643798	Soluble Chloride (Cl)	2013/03/12					<5.0	mg/L	9.1	30		
6643800	Soluble Sulphate (SO4)	2013/03/12					<10	mg/L	8.2	30		
6643803	Wet Soluble Calcium (Ca)	2013/03/12					<5.0	mg/L	11.8	30		
6643803	Wet Soluble Magnesium (Mg)	2013/03/12					<5.0	mg/L	16.0	30		
6643803	Wet Soluble Potassium (K)	2013/03/12					<20	mg/L	NC	30		
6643803	Wet Soluble Sodium (Na)	2013/03/12					<5.0	mg/L	10.8	30		
6643803	Wet Soluble Sulphur (S)	2013/03/12					<30	mg/L	NC	30		
6643812	D10-ANTHRACENE (sur.)	2013/03/13	105	60 - 130	111	60 - 130	117	%				
6643812	D8-ACENAPHTHYLENE (sur.)	2013/03/13	95	50 - 130	103	50 - 130	109	%				
6643812	D8-NAPHTHALENE (sur.)	2013/03/13	95	50 - 130	102	50 - 130	109	%				
6643812	TERPHENYL-D14 (sur.)	2013/03/13	103	60 - 130	110	60 - 130	116	%				
6643812	Naphthalene	2013/03/13	85	50 - 130	90	50 - 130	<0.010	mg/kg	NC(2)	50		
6643812	2-Methylnaphthalene	2013/03/13	87	50 - 130	91	50 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Acenaphthylene	2013/03/13	88	50 - 130	95	50 - 130	<0.0050	mg/kg	NC(2)	50		
6643812	Acenaphthene	2013/03/13	96	50 - 130	98	50 - 130	<0.0050	mg/kg	NC(2)	50		
6643812	Fluorene	2013/03/13	92	50 - 130	97	50 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Phenanthrene	2013/03/13	92	60 - 130	96	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Anthracene	2013/03/13	96	60 - 130	106	60 - 130	<0.0040	mg/kg	NC(2)	50		
6643812	Fluoranthene	2013/03/13	97	60 - 130	100	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Pyrene	2013/03/13	96	60 - 130	99	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Benzo(a)anthracene	2013/03/13	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Chrysene	2013/03/13	88	60 - 130	95	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Benzo(b&j)fluoranthene	2013/03/13	82	60 - 130	91	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Benzo(k)fluoranthene	2013/03/13	94	60 - 130	92	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Benzo(a)pyrene	2013/03/13	94	60 - 130	99	60 - 130	<0.020	mg/kg	NC(2)	50		
6643812	Indeno(1,2,3-cd)pyrene	2013/03/13	87	60 - 130	97	60 - 130	<0.050	mg/kg	NC(2)	50		
6643812	Dibenz(a,h)anthracene	2013/03/13	87	60 - 130	96	60 - 130	<0.050	mg/kg	NC(2)	50		
6643812	Benzo(g,h,i)perylene	2013/03/13	82	60 - 130	89	60 - 130	<0.050	mg/kg	NC(2)	50		
6643862	Saturation %	2013/03/13			105	80 - 120	<1.0	%	0.1	30		
6643865	Soluble pH	2013/03/13			100	97 - 103			0.1	20		
6643866	Soluble Conductivity	2013/03/13			93	70 - 130	<1.0	uS/cm	0.4	35		
6643927	O-TERPHENYL (sur.)	2013/03/13	117	50 - 130	105	50 - 130	109	%				

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QUALITY ASSURANCE REPORT

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QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6643927	F2 (C10-C16 Hydrocarbons)	2013/03/13	105	50 - 130	93	80 - 120	<10	mg/kg	16.6	40		
6643927	F3 (C16-C34 Hydrocarbons)	2013/03/13	NC	50 - 130	97	80 - 120	<10	mg/kg	16.7	40		
6643927	F4 (C34-C50 Hydrocarbons)	2013/03/13	113	50 - 130	96	80 - 120	<10	mg/kg	32.3	40		
6643927	Reached Baseline at C50	2013/03/13					YES, RDL=N/A	mg/kg	NC	50		
6643929	D10-ANTHRACENE (sur.)	2013/03/12	87	60 - 130	103	60 - 130	108	%				
6643929	D8-ACENAPHTHYLENE (sur.)	2013/03/12	82	50 - 130	97	50 - 130	105	%				
6643929	D8-NAPHTHALENE (sur.)	2013/03/12	81	50 - 130	98	50 - 130	105	%				
6643929	TERPHENYL-D14 (sur.)	2013/03/12	89	60 - 130	103	60 - 130	109	%				
6643929	Naphthalene	2013/03/13	73	50 - 130	87	50 - 130	<0.010	mg/kg	NC	50		
6643929	2-Methylnaphthalene	2013/03/13	75	50 - 130	87	50 - 130	<0.020	mg/kg	NC	50		
6643929	Acenaphthylene	2013/03/13	75	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
6643929	Acenaphthene	2013/03/13	79	50 - 130	92	50 - 130	<0.0050	mg/kg	NC	50		
6643929	Fluorene	2013/03/13	78	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6643929	Phenanthrene	2013/03/13	75	60 - 130	89	60 - 130	<0.020	mg/kg	4.3	50		
6643929	Anthracene	2013/03/13	83	60 - 130	94	60 - 130	<0.0040	mg/kg	2.1	50		
6643929	Fluoranthene	2013/03/13	80	60 - 130	92	60 - 130	<0.020	mg/kg	3.9	50		
6643929	Pyrene	2013/03/13	82	60 - 130	89	60 - 130	<0.020	mg/kg	9.2	50		
6643929	Benzo(a)anthracene	2013/03/13	70	60 - 130	85	60 - 130	<0.020	mg/kg	NC	50		
6643929	Chrysene	2013/03/13	73	60 - 130	89	60 - 130	<0.020	mg/kg	14.2	50		
6643929	Benzo(b&j)fluoranthene	2013/03/13	72	60 - 130	82	60 - 130	<0.020	mg/kg	11.1	50		
6643929	Benzo(k)fluoranthene	2013/03/13	72	60 - 130	92	60 - 130	<0.020	mg/kg	NC	50		
6643929	Benzo(a)pyrene	2013/03/13	78	60 - 130	92	60 - 130	<0.020	mg/kg	17.0	50		
6643929	Indeno(1,2,3-cd)pyrene	2013/03/13	79	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
6643929	Dibenz(a,h)anthracene	2013/03/13	80	60 - 130	90	60 - 130	<0.050	mg/kg	NC	50		
6643929	Benzo(g,h,i)perylene	2013/03/13	72	60 - 130	88	60 - 130	<0.050	mg/kg	NC	50		
6644425	D10-ANTHRACENE (sur.)	2013/03/13			89	60 - 130	96	%				
6644425	D8-ACENAPHTHYLENE (sur.)	2013/03/13			83	50 - 130	90	%				
6644425	D8-NAPHTHALENE (sur.)	2013/03/13			82	50 - 130	89	%				
6644425	TERPHENYL-D14 (sur.)	2013/03/13			93	60 - 130	101	%				
6644425	Naphthalene	2013/03/13			88	50 - 130	<0.010	mg/kg				
6644425	2-Methylnaphthalene	2013/03/13			90	50 - 130	<0.020	mg/kg				
6644425	Acenaphthylene	2013/03/13			94	50 - 130	<0.0050	mg/kg				
6644425	Acenaphthene	2013/03/13			96	50 - 130	<0.0050	mg/kg				
6644425	Fluorene	2013/03/13			97	50 - 130	<0.020	mg/kg				
6644425	Phenanthrene	2013/03/13			95	60 - 130	<0.020	mg/kg				
6644425	Anthracene	2013/03/13			107	60 - 130	<0.0040	mg/kg				
6644425	Fluoranthene	2013/03/13			103	60 - 130	<0.020	mg/kg				
6644425	Pyrene	2013/03/13			101	60 - 130	<0.020	mg/kg				
6644425	Benzo(a)anthracene	2013/03/13			93	60 - 130	<0.020	mg/kg				

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QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6644425	Chrysene	2013/03/13			96	60 - 130	<0.020	mg/kg				
6644425	Benzo(b&j)fluoranthene	2013/03/13			97	60 - 130	<0.020	mg/kg				
6644425	Benzo(k)fluoranthene	2013/03/13			93	60 - 130	<0.020	mg/kg				
6644425	Benzo(a)pyrene	2013/03/13			99	60 - 130	<0.020	mg/kg				
6644425	Indeno(1,2,3-cd)pyrene	2013/03/13			101	60 - 130	<0.050	mg/kg				
6644425	Dibenz(a,h)anthracene	2013/03/13			100	60 - 130	<0.050	mg/kg				
6644425	Benzo(g,h,i)perylene	2013/03/13			95	60 - 130	<0.050	mg/kg				
6644658	O-TERPHENYL (sur.)	2013/03/13	91	50 - 130	96	50 - 130	96	%				
6644658	EPH (C10-C19)	2013/03/13	112	50 - 130	110	50 - 130	<100	mg/kg	NC	40		
6644658	EPH (C19-C32)	2013/03/13	95	50 - 130	95	50 - 130	<100	mg/kg	NC	40		
6647338	Wet Soluble Calcium (Ca)	2013/03/13					<5.0	mg/L	4.6	30		
6647338	Wet Soluble Magnesium (Mg)	2013/03/13					<5.0	mg/L	NC	30		
6647338	Wet Soluble Potassium (K)	2013/03/13					<20	mg/L	NC	30		
6647338	Wet Soluble Sodium (Na)	2013/03/13					<5.0	mg/L	1.8	30		
6647338	Wet Soluble Sulphur (S)	2013/03/13					<30	mg/L	NC	30		
6648232	Soluble Chloride (Cl)	2013/03/13					5.7, RDL=5.0	mg/L	3.3	30		
6648234	Soluble Sulphate (SO4)	2013/03/13					<10	mg/L	1	30		
6659576	Initial pH of Sample	2013/03/19					4.90, RDL=N/A	pH Units	0.1	20		
6659576	Final pH of Leachate	2013/03/19					4.90, RDL=N/A	pH Units	1.5	20		
6659576	pH of Leaching Fluid	2013/03/19					4.90, RDL=N/A	pH Units	0	20		
6659576	pH after HCl	2013/03/19							2.7	20		
6663792	LEACHATE Arsenic (As)	2013/03/19	92	75 - 125	101	75 - 125	<0.10	mg/L				
6666553	Leachate D10-ANTHRACENE (sur.)	2013/03/21			94	60 - 130	88	%				
6666553	Leachate D8-ACENAPHTHYLENE (sur.)	2013/03/21			76	50 - 130	75	%				
6666553	Leachate D8-NAPHTHALENE (sur.)	2013/03/21			71	50 - 130	75	%				

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QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6666553	Leachate TERPHENYL-D14 (sur.)	2013/03/21			96	60 - 130	90	%				
6666553	Leachate Benzo(a)pyrene	2013/03/21			90	60 - 130	<0.10	ug/L				

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - RDL raised due to sample dilution.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B317896	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V6	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828	CHAIN OF CUSTODY #: C#353268-09-01	PROJECT MANAGER: Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Project Name:			
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC		
				Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FU4511	SP13-74-130305	13/03/05		Soil		X	X						X			2	
2	FU4512	SP13-75-130305					X	X						X			2	
3	FU4513	SP13-76-130305					X	X	X	X	X			X			2	
4	FU4514	SP13-77-130305					X	X						X			2	
5	FU4515	SP13-78-130305					X	X						X			2	
6	FU4516	SP13-79-130305					X	X						X			2	
7	FU4517	SP13-79-01-130305					X	X						X			2	
8	FU4518	SP13-80-130305					X	X	X	X	X			X			2	
9	FU4519	SP13-81-130305					X	X						X			2	B317896
10	FU4520	SP13-82-130305					X	X						X			2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[illegible]	13/03/05	16:00	[illegible]	2013/03/06	08:00		[ ]	2.2.1	[x] Yes [ ] No

*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free:(800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B317896	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #: C#353268-11-01	PROJECT MANAGER: Kim Dymino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FU4521	SP13-83-130305	13/03/05		Soil		X	X						X			2	
2	FU4522	SP13-84-130305					X	X						X			2	
3	FU4523	SP13-85-130305					X	X						X			2	
4	FU4524	SP13-86-130305					X	X	X	X	X			X			2	
5	FU4525	SP13-87-130305					X	X						X			2	
6	FU4526	SP13-88-130305					X	X						X			2	
7	FU4527	SP13-89-130305					X	X						X			2	
8	FU4528	SP13-90-130305					X	X	X	X	X			X			2	B317896
9	FU4529	SP13-90-01-130305					X	X						X			2	
10		SP13-68-01-130304	13/03/04		Soil		X	X						X				

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[illegible]	13/03/05	16:00	[illegible]	2013/03/06	08:00		☐	2.2, 1	☑ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#353268-12-01	Kim Dominic
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other: _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1		SP13-69-130304	13/03/04		Soil		X	X						X			2	
2		SP13-70-130304					X	X						X			2	
3		SP13-71-130304					X	X						X			2	
4		SP13-72-130304					X	X						X			2	
5		SP13-73-130304					X	X						X			2	
6																		
7																		
8																		
9																		
10																		

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

B317896

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal intact on Cooler?
[illegible]	13/03/05	16:00	[illegible]	2013/03/06	08:00		[ ]	22.1	[x] Yes [ ] No

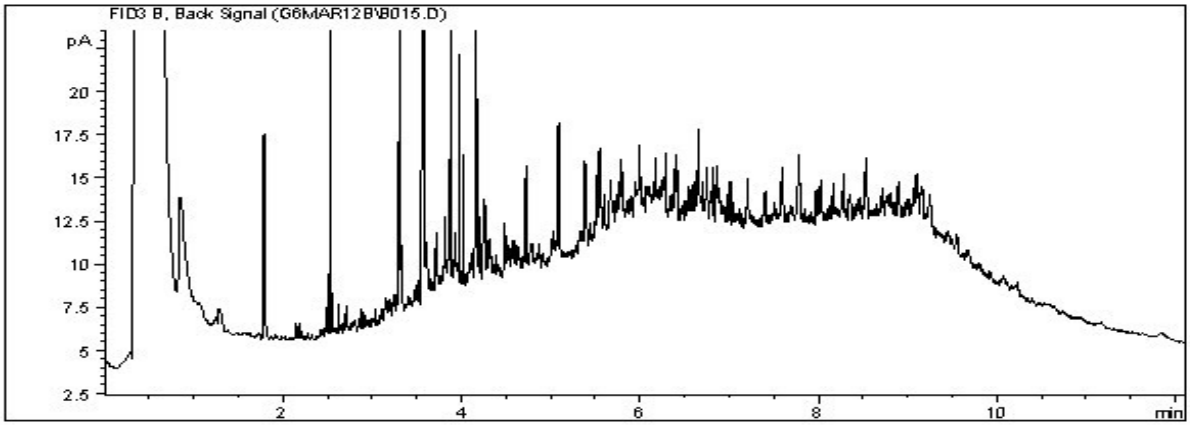
*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

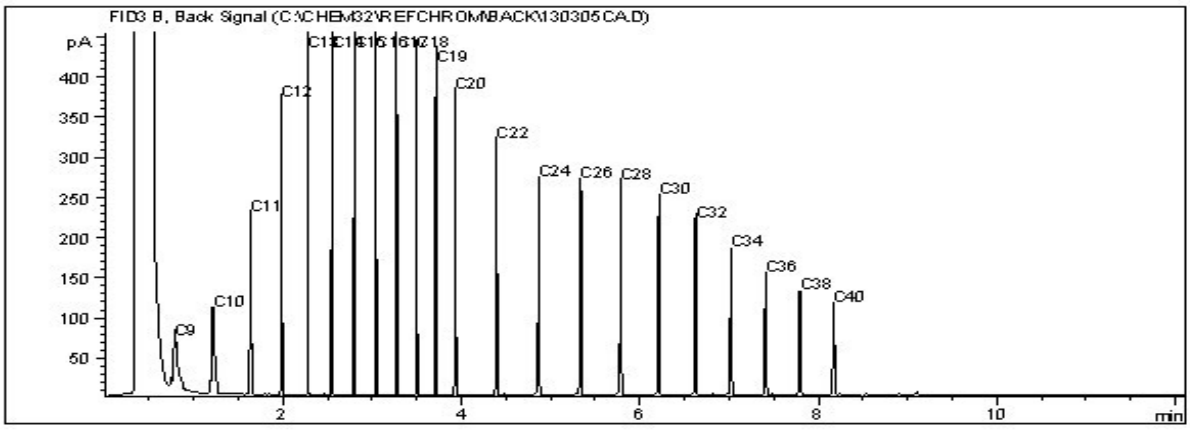
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4513

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-76-130305

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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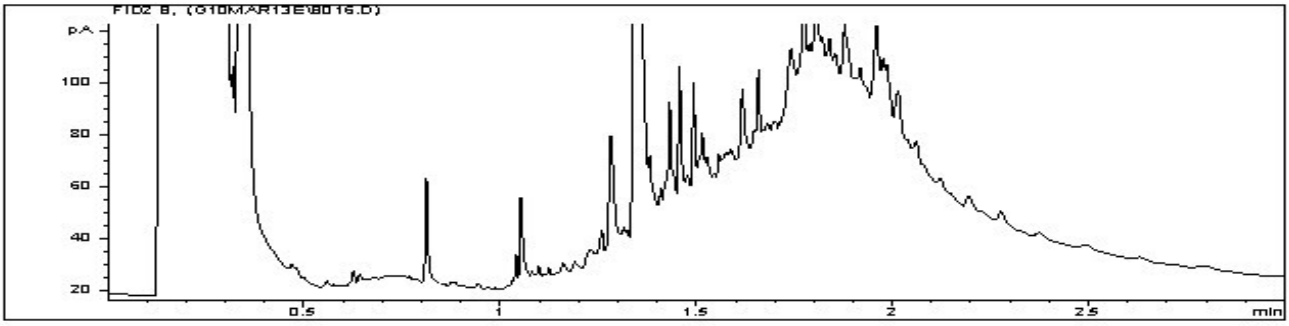
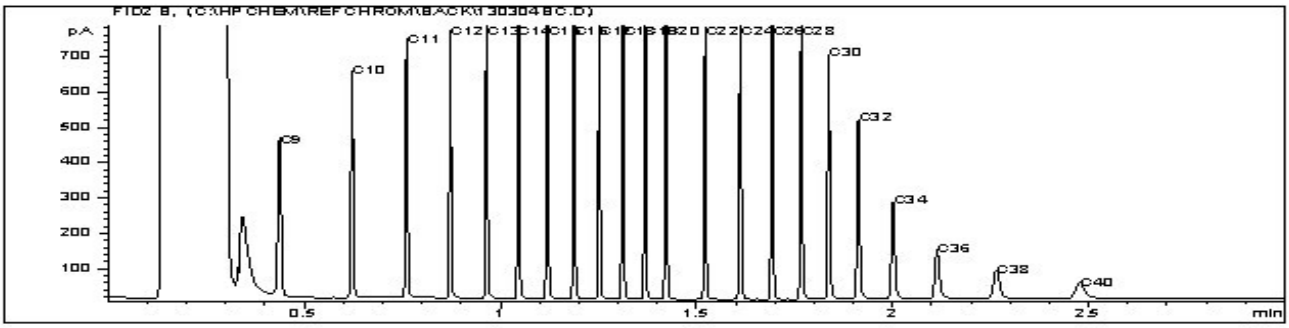
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4513

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-76-130305

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

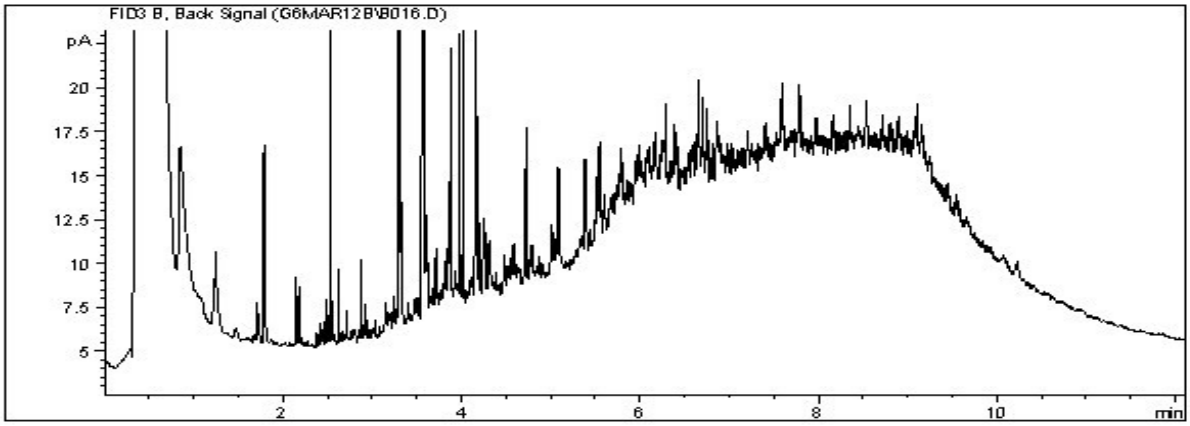
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

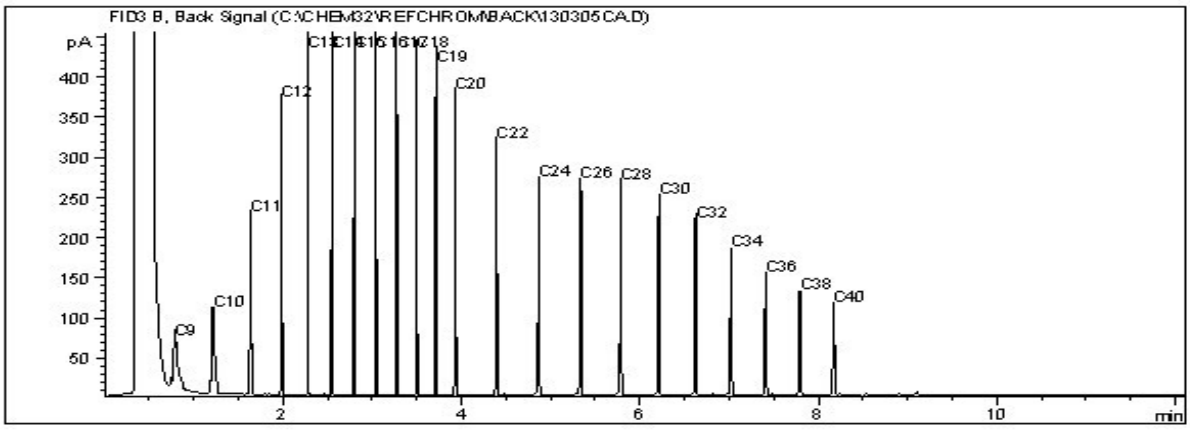
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4518

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-80-130305

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

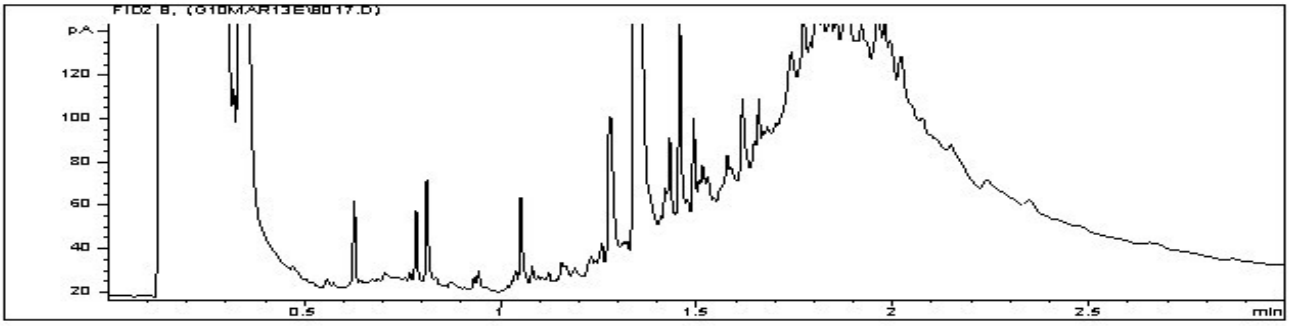
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

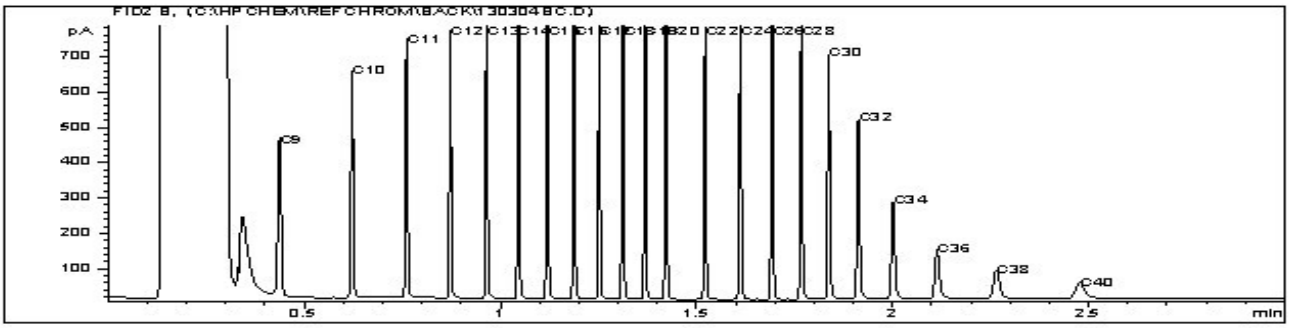
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4518

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-80-130305

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

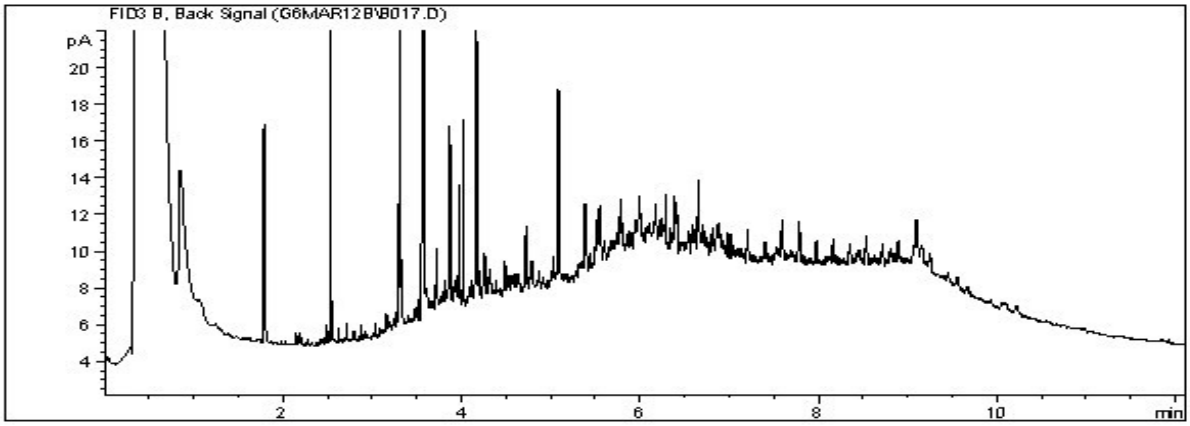
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

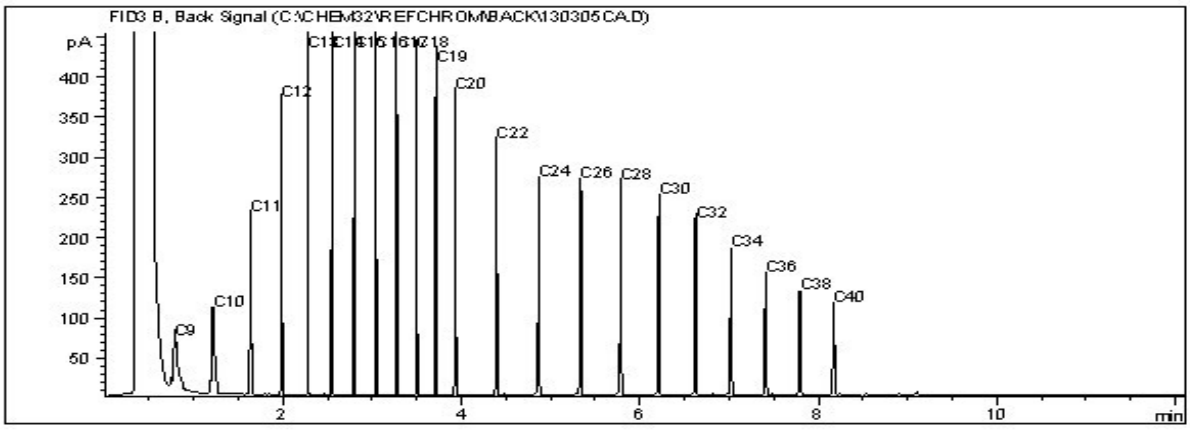
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4524

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-86-130305

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

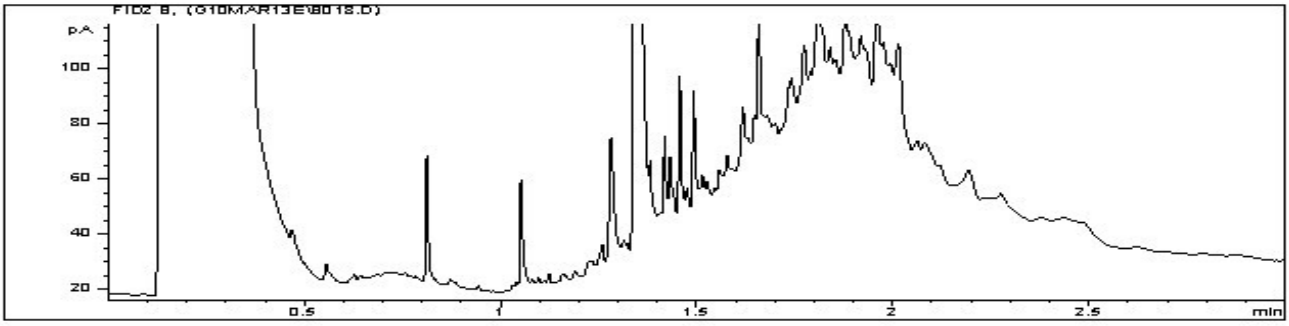
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

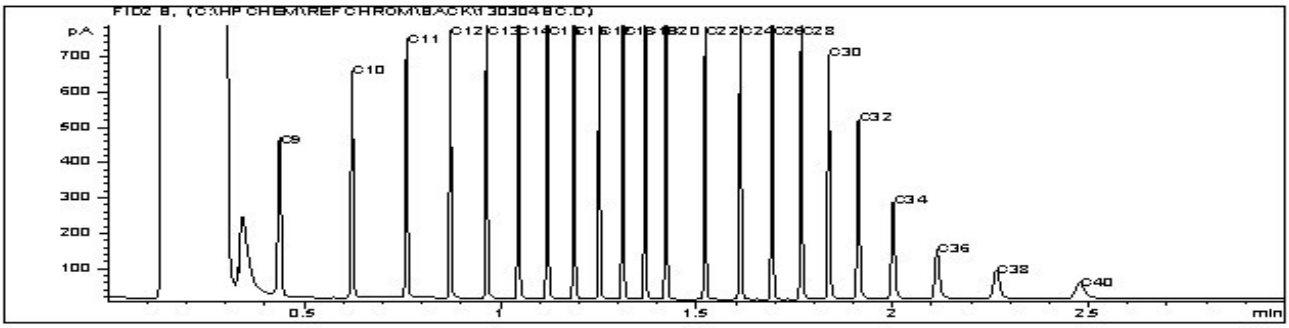
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4524

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-86-130305

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

Page 1 of 1

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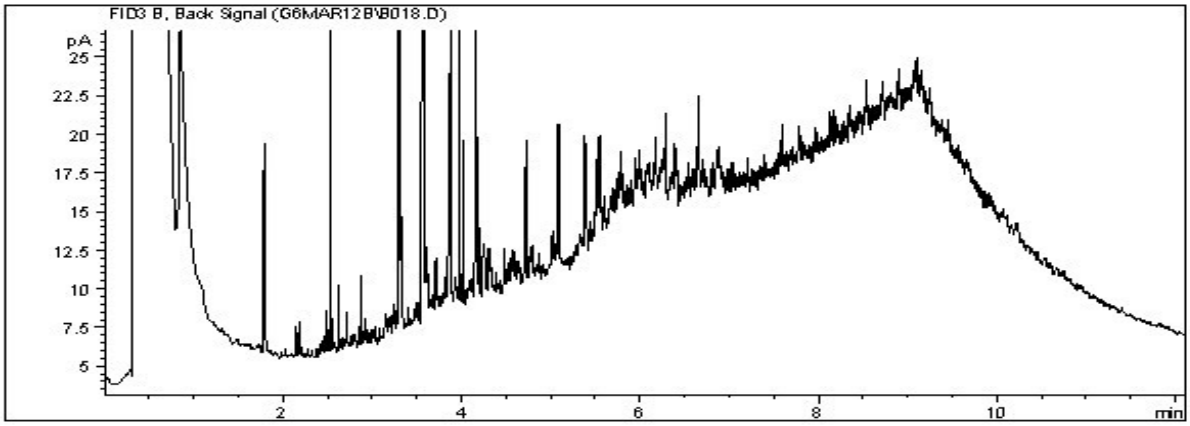
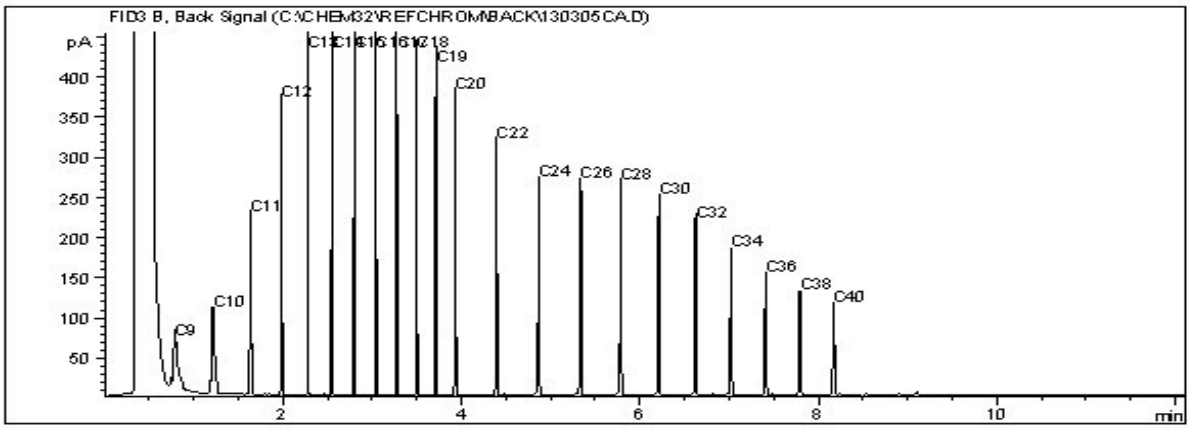
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4528

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-90-130305

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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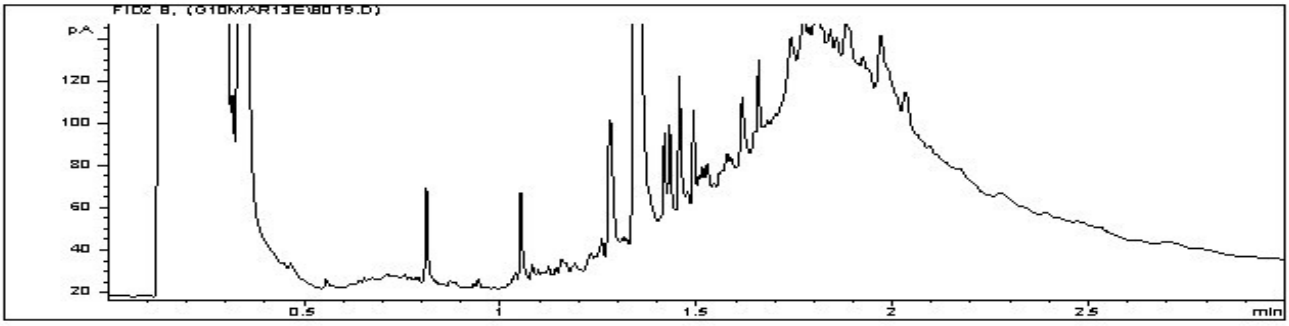
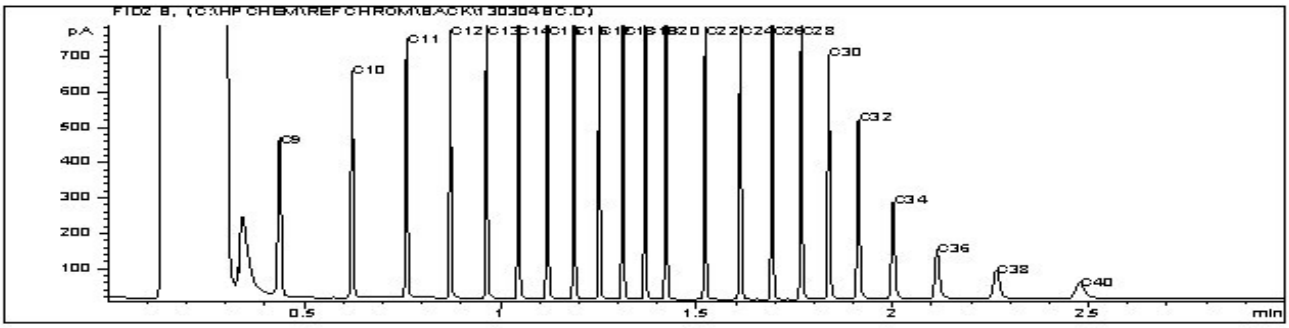
Report Date: 2013/03/21
Maxxam Job #: B317896
Maxxam Sample: FU4528

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-90-130305

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18
Your C.O.C. #: 35326815, 35326816, 35326817

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/20
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B318225
Received: 2013/03/07, 08:00

Sample Matrix: Soil
Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/03/10	2013/03/12	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	24	2013/03/12	2013/03/13	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	24	2013/03/12	2013/03/13	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	2	N/A	2013/03/12	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	2	2013/03/10	2013/03/14	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	24	2013/03/09	2013/03/11	BBY7SOP-00001	EPA 6020A
Metals - TCLP	2	2013/03/18	2013/03/19	BBY7SOP-00001	EPA 6020A
Moisture	2	N/A	2013/03/11	BBY8SOP-00017	Ont MOE -E 3139
Moisture	22	N/A	2013/03/13	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/10	2013/03/13	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/10	2013/03/14	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	7	2013/03/12	2013/03/13	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	15	2013/03/12	2013/03/14	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	24	N/A	2013/03/14	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	24	N/A	2013/03/14	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	24	2013/03/11	2013/03/11	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	24	2013/03/12	2013/03/13	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	2	N/A	2013/03/19	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	15	N/A	2013/03/11		
Sodium Adsorption Ratio SP	9	N/A	2013/03/12		
Saturated Paste	24	2013/03/12	2013/03/13	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	5	N/A	2013/03/13		
Soluble Ions Na, Cl	19	N/A	2013/03/14		
Sulphate (soluble) (soil)	24	2013/03/12	2013/03/13	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	5	N/A	2013/03/13	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	19	N/A	2013/03/14	BBY7SOP-00002	EPA 6020A
BC Hydrocarbons in Soil by GC/FID	2	2013/03/10	2013/03/14	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	2	N/A	2013/03/12	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FU7978	FU7984	FU7984		
Sampling Date		2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-93-130306**	**SP13-99-130306**	**SP13-99-130306 Lab-Dup**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	12	10	6646209
F3 (C16-C34 Hydrocarbons)	mg/kg	88	200	230	10	6646209
F4 (C34-C50 Hydrocarbons)	mg/kg	72	140	160	10	6646209
Reached Baseline at C50	mg/kg	YES	YES	YES	N/A	6646209
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	112	97	97		6646209

PHYSICAL TESTING (SOIL)

Maxxam ID		FU7976	FU7977		FU7978		FU7979	FU7980		
Sampling Date		2013/03/06	2013/03/06		2013/03/06		2013/03/06	2013/03/06		
	UNITS	**SP13-91-130306**	**SP13-92-130306**	**QC Batch**	**SP13-93-130306**	**QC Batch**	**SP13-94-130306**	**SP13-95-130306**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	15	15	6641902	16	6634768	12	17	0.30	6641902

Maxxam ID		FU7980	FU7981	FU7982	FU7983		FU7984		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06		2013/03/06		
	UNITS	**SP13-95-130306 Lab-Dup**	**SP13-96-130306**	**SP13-97-130306**	**SP13-98-130306**	**QC Batch**	**SP13-99-130306**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	16	13	15	16	6641902	14	0.30	6634768

Maxxam ID		FU8294	FU8295	FU8296	FU8297	FU8298		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-100-01-130306**	**SP13-101-130306**	**SP13-102-130306**	**SP13-103-130306**	**SP13-104-130306**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	16	16	17	17	16	0.30	6641902

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B318225
Report Date: 2013/03/20

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Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PHYSICAL TESTING (SOIL)

Maxxam ID		FU8299		FU8300	FU8301	FU8302	FU8312		
Sampling Date		2013/03/06		2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-105-130306**	**QC Batch**	**SP13-106-130306**	**SP13-107-130306**	**SP13-108-130306**	**SP13-109-130306**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	15	6641895	15	14	13	17	0.30	6641902

Maxxam ID		FU8313		FU8314	FU8315	FU8368		
Sampling Date		2013/03/06		2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-110-01-130306**	**QC Batch**	**SP13-111-130306**	**SP13-112-130306**	**SP13-100-130306**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	14	6641895	19	10	16	0.30	6641902

Maxxam ID		FU8370		
Sampling Date		2013/03/06		
	UNITS	**SP13-110-130306**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	13	0.30	6641584

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FU7979	FU7979	FU8302		
Sampling Date		2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-94-130306**	**SP13-94-130306 Lab-Dup**	**SP13-108-130306**	**RDL**	**QC Batch**
TCLP Extraction Procedure						
Initial pH of Sample	pH Units	8.86	8.87	9.04	N/A	6659576
pH after HCl	pH Units	1.85	1.90	1.95	N/A	6659576
Final pH of Leachate	pH Units	5.17	5.25	5.24	N/A	6659576
pH of Leaching Fluid	pH Units	4.90	4.90	4.90	N/A	6659576

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FU7978	FU7984		
Sampling Date		2013/03/06	2013/03/06		
	UNITS	**SP13-93-130306**	**SP13-99-130306**	**RDL**	**QC Batch**
Hydrocarbons					
EPH (C10-C19)	mg/kg	<100	<100	100	6648142
EPH (C19-C32)	mg/kg	<100	199	100	6648142
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	102	98		6648142

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FU7978	FU7984		
Sampling Date		2013/03/06	2013/03/06		
	UNITS	**SP13-93-130306**	**SP13-99-130306**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	6628637
Volatiles					
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	10	6627237
Methyl-tert-butylether (MTBE)	mg/kg	<0.10(1)	<0.10(1)	0.10	6639845
Benzene	mg/kg	<0.0050(1)	<0.0050(1)	0.0050	6639845
Toluene	mg/kg	<0.020(1)	<0.020(1)	0.020	6639845
Ethylbenzene	mg/kg	<0.010(1)	<0.010(1)	0.010	6639845
m & p-Xylene	mg/kg	<0.040(1)	<0.040(1)	0.040	6639845
o-Xylene	mg/kg	<0.040(1)	<0.040(1)	0.040	6639845
Styrene	mg/kg	<0.030(1)	<0.030(1)	0.030	6639845
Xylenes (Total)	mg/kg	<0.040	<0.040	0.040	6639845
VH C6-C10	mg/kg	<10(1)	<10(1)	10	6639845
(C6-C10)	mg/kg	<10(1)	<10(1)	10	6639845
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	97	98		6639845
4-BROMOFLUOROBENZENE (sur.)	%	99	95		6639845
D10-ETHYLBENZENE (sur.)	%	103	103		6639845
D4-1,2-DICHLOROETHANE (sur.)	%	105	107		6639845

RDL = Reportable Detection Limit
(1) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU7976	FU7977	FU7978	FU7979	FU7980	FU7981		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-91-130306**	**SP13-92-130306**	**SP13-93-130306**	**SP13-94-130306**	**SP13-95-130306**	**SP13-96-130306**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.73	7.65	7.75	7.78	7.71	7.70	0.010	6635074
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21500	20000	20900	20800	21600	21300	100	6635073
Total Antimony (Sb)	mg/kg	54.6	40.4	37.6	37.4	39.0	47.4	0.10	6635073
Total Arsenic (As)	mg/kg	107	73.9	73.1	76.1	83.1	100	0.50	6635073
Total Barium (Ba)	mg/kg	107	109	109	95.7	107	112	0.10	6635073
Total Beryllium (Be)	mg/kg	0.41	<0.40	0.43	<0.40	<0.40	<0.40	0.40	6635073
Total Bismuth (Bi)	mg/kg	0.30	0.32	0.31	0.38	0.25	0.43	0.10	6635073
Total Cadmium (Cd)	mg/kg	0.567	0.578	0.549	0.487	0.546	0.601	0.050	6635073
Total Calcium (Ca)	mg/kg	9750	8870	9690	9270	9180	9550	100	6635073
Total Chromium (Cr)	mg/kg	46.3	40.3	39.8	40.6	44.9	44.5	1.0	6635073
Total Cobalt (Co)	mg/kg	15.6	13.6	15.1	14.1	15.6	15.0	0.30	6635073
Total Copper (Cu)	mg/kg	172	177	565	184	186	200	0.50	6635073
Total Iron (Fe)	mg/kg	30000	26900	30100	28500	30600	29800	100	6635073
Total Lead (Pb)	mg/kg	123	120	132	404	120	113	0.10	6635073
Total Lithium (Li)	mg/kg	13.1	12.5	13.2	12.5	12.9	13.0	5.0	6635073
Total Magnesium (Mg)	mg/kg	7490	6940	6880	7630	8090	7540	100	6635073
Total Manganese (Mn)	mg/kg	528	486	516	548	505	517	0.20	6635073
Total Mercury (Hg)	mg/kg	0.258	0.301	0.323	0.442	0.536	0.307	0.050	6635073
Total Molybdenum (Mo)	mg/kg	7.25	4.16	6.30	5.19	5.49	5.82	0.10	6635073
Total Nickel (Ni)	mg/kg	32.7	31.9	30.4	30.8	32.2	31.7	0.80	6635073
Total Phosphorus (P)	mg/kg	651	625	725	711	661	676	10	6635073
Total Potassium (K)	mg/kg	763	697	760	703	761	791	100	6635073
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6635073
Total Silver (Ag)	mg/kg	0.185	0.192	0.220	0.305	0.189	0.229	0.050	6635073
Total Sodium (Na)	mg/kg	402	328	339	337	333	397	100	6635073
Total Strontium (Sr)	mg/kg	64.3	52.0	61.0	61.3	61.1	60.5	0.10	6635073
Total Thallium (Tl)	mg/kg	0.090	0.083	0.094	0.080	0.086	0.102	0.050	6635073
Total Tin (Sn)	mg/kg	9.69	8.80	8.71	8.83	7.80	9.02	0.10	6635073
Total Titanium (Ti)	mg/kg	994	908	955	931	970	943	1.0	6635073
Total Uranium (U)	mg/kg	0.774	0.665	0.894	0.719	0.775	0.937	0.050	6635073
Total Vanadium (V)	mg/kg	74.2	67.1	70.8	69.7	72.1	71.5	2.0	6635073
Total Zinc (Zn)	mg/kg	563	421	638	504	563	644	1.0	6635073
Total Zirconium (Zr)	mg/kg	3.29	3.10	3.21	3.03	3.14	3.45	0.50	6635073

RDL = Reportable Detection Limit

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU7982	FU7983	FU7984	FU8294	FU8295	FU8296		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-97-130306**	**SP13-98-130306**	**SP13-99-130306**	**SP13-100-01-130306**	**SP13-101-130306**	**SP13-102-130306**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.71	7.60	7.56	7.69	7.55	7.62	0.010	6635074
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20300	21300	21300	21700	21000	21000	100	6635073
Total Antimony (Sb)	mg/kg	40.8	34.3	26.5	35.4	32.5	33.0	0.10	6635073
Total Arsenic (As)	mg/kg	77.2	66.9	49.4	63.6	63.6	62.8	0.50	6635073
Total Barium (Ba)	mg/kg	110	115	106	98.3	97.2	98.6	0.10	6635073
Total Beryllium (Be)	mg/kg	<0.40	0.46	<0.40	0.46	<0.40	<0.40	0.40	6635073
Total Bismuth (Bi)	mg/kg	0.39	0.20	0.22	0.19	0.18	0.19	0.10	6635073
Total Cadmium (Cd)	mg/kg	0.579	0.463	0.485	0.538	0.456	0.453	0.050	6635073
Total Calcium (Ca)	mg/kg	8820	10500	9380	9140	9320	9170	100	6635073
Total Chromium (Cr)	mg/kg	38.7	43.1	41.0	40.4	39.8	40.4	1.0	6635073
Total Cobalt (Co)	mg/kg	13.7	14.2	13.3	14.7	13.4	13.8	0.30	6635073
Total Copper (Cu)	mg/kg	150	137	206	160	145	144	0.50	6635073
Total Iron (Fe)	mg/kg	28200	27800	26700	29000	27400	27600	100	6635073
Total Lead (Pb)	mg/kg	118	123	91.8	93.4	86.1	87.1	0.10	6635073
Total Lithium (Li)	mg/kg	12.6	13.1	12.1	13.2	12.7	12.9	5.0	6635073
Total Magnesium (Mg)	mg/kg	7110	7180	7030	7670	7270	7430	100	6635073
Total Manganese (Mn)	mg/kg	512	519	507	567	512	517	0.20	6635073
Total Mercury (Hg)	mg/kg	0.276	0.372	0.287	0.240	0.470	0.464	0.050	6635073
Total Molybdenum (Mo)	mg/kg	4.16	3.62	3.07	3.31	4.12	4.15	0.10	6635073
Total Nickel (Ni)	mg/kg	29.5	31.5	31.7	31.0	30.6	30.1	0.80	6635073
Total Phosphorus (P)	mg/kg	675	660	646	611	622	628	10	6635073
Total Potassium (K)	mg/kg	699	735	669	689	678	688	100	6635073
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6635073
Total Silver (Ag)	mg/kg	0.188	0.147	0.170	0.193	0.159	0.169	0.050	6635073
Total Sodium (Na)	mg/kg	390	374	279	313	345	361	100	6635073
Total Strontium (Sr)	mg/kg	65.9	74.9	58.9	52.3	64.0	63.6	0.10	6635073
Total Thallium (Tl)	mg/kg	0.081	0.075	0.071	0.080	0.077	0.079	0.050	6635073
Total Tin (Sn)	mg/kg	17.2	6.21	5.21	8.52	5.72	5.70	0.10	6635073
Total Titanium (Ti)	mg/kg	909	876	916	971	995	1000	1.0	6635073
Total Uranium (U)	mg/kg	0.756	0.680	0.672	0.669	0.657	0.661	0.050	6635073
Total Vanadium (V)	mg/kg	68.6	71.3	69.3	73.3	67.7	68.6	2.0	6635073
Total Zinc (Zn)	mg/kg	473	440	358	409	384	381	1.0	6635073
Total Zirconium (Zr)	mg/kg	3.19	3.30	3.00	3.31	3.09	3.10	0.50	6635073

RDL = Reportable Detection Limit

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU8297	FU8298	FU8299		FU8300	FU8301		
Sampling Date		2013/03/06	2013/03/06	2013/03/06		2013/03/06	2013/03/06		
	UNITS	**SP13-103-130306**	**SP13-104-130306**	**SP13-105-130306**	**QC Batch**	**SP13-106-130306**	**SP13-107-130306**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.74	7.71	7.69	6635074	7.72	7.68	0.010	6635077
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20600	19900	21300	6635073	20800	20100	100	6635076
Total Antimony (Sb)	mg/kg	29.5	35.3	22.8	6635073	28.2	35.2	0.10	6635076
Total Arsenic (As)	mg/kg	53.6	68.6	45.8	6635073	60.2	70.0	0.50	6635076
Total Barium (Ba)	mg/kg	99.7	96.8	92.3	6635073	117	100	0.10	6635076
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	6635073	<0.40	<0.40	0.40	6635076
Total Bismuth (Bi)	mg/kg	0.19	0.27	0.20	6635073	0.22	0.24	0.10	6635076
Total Cadmium (Cd)	mg/kg	0.494	0.556	0.569	6635073	0.531	0.504	0.050	6635076
Total Calcium (Ca)	mg/kg	9920	9360	9030	6635073	9360	9070	100	6635076
Total Chromium (Cr)	mg/kg	39.4	43.2	43.2	6635073	43.5	44.7	1.0	6635076
Total Cobalt (Co)	mg/kg	13.4	13.5	13.5	6635073	14.9	14.4	0.30	6635076
Total Copper (Cu)	mg/kg	156	159	124	6635073	145	152	0.50	6635076
Total Iron (Fe)	mg/kg	27600	28300	28600	6635073	29900	33200	100	6635076
Total Lead (Pb)	mg/kg	89.8	97.6	69.0	6635073	88.8	128	0.10	6635076
Total Lithium (Li)	mg/kg	12.8	12.4	13.9	6635073	12.2	11.9	5.0	6635076
Total Magnesium (Mg)	mg/kg	7050	7480	7550	6635073	7750	7880	100	6635076
Total Manganese (Mn)	mg/kg	509	517	514	6635073	530	518	0.20	6635076
Total Mercury (Hg)	mg/kg	0.373	0.392	0.227	6635073	0.449	0.252	0.050	6635076
Total Molybdenum (Mo)	mg/kg	3.88	3.96	2.95	6635073	4.35	3.96	0.10	6635076
Total Nickel (Ni)	mg/kg	30.6	30.4	31.9	6635073	31.3	30.6	0.80	6635076
Total Phosphorus (P)	mg/kg	632	642	686	6635073	653	615	10	6635076
Total Potassium (K)	mg/kg	692	701	714	6635073	753	656	100	6635076
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	6635073	<0.50	<0.50	0.50	6635076
Total Silver (Ag)	mg/kg	0.233	0.181	0.158	6635073	0.148	0.170	0.050	6635076
Total Sodium (Na)	mg/kg	325	305	289	6635073	349	323	100	6635076
Total Strontium (Sr)	mg/kg	56.2	52.5	53.9	6635073	66.3	51.8	0.10	6635076
Total Thallium (Tl)	mg/kg	0.085	0.083	0.070	6635073	0.081	0.074	0.050	6635076
Total Tin (Sn)	mg/kg	5.95	8.08	5.00	6635073	6.46	6.37	0.10	6635076
Total Titanium (Ti)	mg/kg	956	919	1000	6635073	1010	899	1.0	6635076
Total Uranium (U)	mg/kg	0.804	0.834	0.647	6635073	0.784	0.790	0.050	6635076
Total Vanadium (V)	mg/kg	68.1	67.4	73.3	6635073	73.8	72.7	2.0	6635076
Total Zinc (Zn)	mg/kg	401	536	337	6635073	416	444	1.0	6635076
Total Zirconium (Zr)	mg/kg	3.38	3.34	3.81	6635073	3.20	3.13	0.50	6635076

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU8302	FU8312	FU8313	FU8314	FU8315	FU8368		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-108-130306**	**SP13-109-130306**	**SP13-110-01-130306**	**SP13-111-130306**	**SP13-112-130306**	**SP13-100-130306**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.81	7.49	7.79	7.79	7.79	7.48	0.010	6635077
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20300	21500	20000	21000	20400	20900	100	6635076
Total Antimony (Sb)	mg/kg	30.6	42.8	53.4	37.1	42.8	24.2	0.10	6635076
Total Arsenic (As)	mg/kg	64.4	88.6	107	69.3	98.8	55.8	0.50	6635076
Total Barium (Ba)	mg/kg	111	112	127	109	114	99.3	0.10	6635076
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.42	<0.40	<0.40	<0.40	0.40	6635076
Total Bismuth (Bi)	mg/kg	0.27	0.30	0.37	0.24	0.34	0.22	0.10	6635076
Total Cadmium (Cd)	mg/kg	0.693	0.525	0.731	0.576	0.569	0.449	0.050	6635076
Total Calcium (Ca)	mg/kg	9760	8250	10200	8960	8970	8270	100	6635076
Total Chromium (Cr)	mg/kg	58.7	53.0	58.6	53.2	49.5	41.3	1.0	6635076
Total Cobalt (Co)	mg/kg	15.1	16.1	18.6	15.2	15.2	13.9	0.30	6635076
Total Copper (Cu)	mg/kg	231	196	269	177	196	119	0.50	6635076
Total Iron (Fe)	mg/kg	31500	31700	34200	30200	30700	29700	100	6635076
Total Lead (Pb)	mg/kg	115	125	138	102	117	74.1	0.10	6635076
Total Lithium (Li)	mg/kg	11.1	12.7	11.9	12.4	11.7	12.7	5.0	6635076
Total Magnesium (Mg)	mg/kg	7970	8170	7810	7680	7650	7800	100	6635076
Total Manganese (Mn)	mg/kg	543	563	594	518	492	532	0.20	6635076
Total Mercury (Hg)	mg/kg	5.35	0.582	0.689	0.496	0.486	0.217	0.050	6635076
Total Molybdenum (Mo)	mg/kg	5.73	6.70	7.54	6.08	6.39	3.96	0.10	6635076
Total Nickel (Ni)	mg/kg	36.8	37.5	36.8	33.6	33.6	31.7	0.80	6635076
Total Phosphorus (P)	mg/kg	725	655	710	673	668	606	10	6635076
Total Potassium (K)	mg/kg	748	757	775	756	765	692	100	6635076
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6635076
Total Silver (Ag)	mg/kg	0.219	0.190	0.240	0.192	0.191	0.146	0.050	6635076
Total Sodium (Na)	mg/kg	311	333	424	360	337	267	100	6635076
Total Strontium (Sr)	mg/kg	61.1	54.1	70.0	56.2	56.1	49.0	0.10	6635076
Total Thallium (Tl)	mg/kg	0.086	0.101	0.112	0.089	0.094	0.070	0.050	6635076
Total Tin (Sn)	mg/kg	8.60	9.18	11.3	7.41	8.06	5.39	0.10	6635076
Total Titanium (Ti)	mg/kg	1050	1040	1010	1120	1020	903	1.0	6635076
Total Uranium (U)	mg/kg	1.13	0.855	1.02	0.830	0.885	0.753	0.050	6635076
Total Vanadium (V)	mg/kg	73.8	76.2	73.8	74.4	71.9	73.9	2.0	6635076
Total Zinc (Zn)	mg/kg	591	545	783	494	608	365	1.0	6635076
Total Zirconium (Zr)	mg/kg	3.11	3.35	2.96	3.44	3.27	3.32	0.50	6635076

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FU8370		
Sampling Date		2013/03/06		
	UNITS	**SP13-110-130306**	**RDL**	**QC Batch**
Physical Properties				
Soluble (2:1) pH	pH Units	7.84	0.010	6635077
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	19600	100	6635076
Total Antimony (Sb)	mg/kg	40.3	0.10	6635076
Total Arsenic (As)	mg/kg	70.3	0.50	6635076
Total Barium (Ba)	mg/kg	102	0.10	6635076
Total Beryllium (Be)	mg/kg	<0.40	0.40	6635076
Total Bismuth (Bi)	mg/kg	0.28	0.10	6635076
Total Cadmium (Cd)	mg/kg	0.624	0.050	6635076
Total Calcium (Ca)	mg/kg	9140	100	6635076
Total Chromium (Cr)	mg/kg	51.2	1.0	6635076
Total Cobalt (Co)	mg/kg	14.6	0.30	6635076
Total Copper (Cu)	mg/kg	185	0.50	6635076
Total Iron (Fe)	mg/kg	29300	100	6635076
Total Lead (Pb)	mg/kg	106	0.10	6635076
Total Lithium (Li)	mg/kg	11.5	5.0	6635076
Total Magnesium (Mg)	mg/kg	7480	100	6635076
Total Manganese (Mn)	mg/kg	507	0.20	6635076
Total Mercury (Hg)	mg/kg	0.686	0.050	6635076
Total Molybdenum (Mo)	mg/kg	5.06	0.10	6635076
Total Nickel (Ni)	mg/kg	35.4	0.80	6635076
Total Phosphorus (P)	mg/kg	658	10	6635076
Total Potassium (K)	mg/kg	682	100	6635076
Total Selenium (Se)	mg/kg	<0.50	0.50	6635076
Total Silver (Ag)	mg/kg	0.179	0.050	6635076
Total Sodium (Na)	mg/kg	360	100	6635076
Total Strontium (Sr)	mg/kg	55.7	0.10	6635076
Total Thallium (Tl)	mg/kg	0.080	0.050	6635076
Total Tin (Sn)	mg/kg	7.67	0.10	6635076
Total Titanium (Ti)	mg/kg	971	1.0	6635076
Total Uranium (U)	mg/kg	0.786	0.050	6635076
Total Vanadium (V)	mg/kg	70.5	2.0	6635076
Total Zinc (Zn)	mg/kg	527	1.0	6635076
Total Zirconium (Zr)	mg/kg	3.02	0.50	6635076

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TCLP METALS (SOIL)

Maxxam ID		FU7979	FU7979	FU8302		
Sampling Date		2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-94-130306**	**SP13-94-130306 Lab-Dup**	**SP13-108-130306**	**RDL**	**QC Batch**
Metals						
LEACHATE Lead (Pb)	mg/L	<0.10	<0.10		0.10	6663792
LEACHATE Mercury (Hg)	mg/L			<0.0020	0.0020	6663792

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU7976	FU7976	FU7977			FU7978		
Sampling Date		2013/03/06	2013/03/06	2013/03/06			2013/03/06		
	UNITS	**SP13-91-130306**	**SP13-91-130306 Lab-Dup**	**SP13-92-130306**	**RDL**	**QC Batch**	**SP13-93-130306**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	5.5		3.8	0.10	6628524	3.0	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.40		0.32	0.10	6628524	0.25	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.070	0.049	0.052	0.010	6646497	0.060	0.010	6648180
2-Methylnaphthalene	mg/kg	0.076	0.063	0.048	0.020	6646497	0.037	0.020	6648180
Acenaphthylene	mg/kg	0.072(1)	0.041(2)	0.039	0.0050	6646497	0.029	0.0050	6648180
Acenaphthene	mg/kg	0.11(3)	0.036(2)	0.053	0.0050	6646497	0.037	0.0050	6648180
Fluorene	mg/kg	0.12(3)	0.043	0.053	0.020	6646497	0.046	0.020	6648180
Phenanthrene	mg/kg	1.4(3)	0.25(2)	0.30	0.020	6646497	0.22	0.020	6648180
Anthracene	mg/kg	0.14(3)	0.066(2)	0.078	0.0040	6646497	0.064	0.0040	6648180
Fluoranthene	mg/kg	1.2(3)	0.40(2)	0.44	0.020	6646497	0.33	0.020	6648180
Pyrene	mg/kg	0.92(3)	0.39(2)	0.42	0.020	6646497	0.31	0.020	6648180
Benzo(a)anthracene	mg/kg	0.24	0.18	0.18	0.020	6646497	0.14	0.020	6648180
Chrysene	mg/kg	0.40(3)	0.21(2)	0.22	0.020	6646497	0.17	0.020	6648180
Benzo(b&j)fluoranthene	mg/kg	0.44	0.27	0.29	0.020	6646497	0.24	0.020	6648180
Benzo(k)fluoranthene	mg/kg	0.14	0.092	0.096	0.020	6646497	0.072	0.020	6648180
Benzo(a)pyrene	mg/kg	0.27	0.21	0.22	0.020	6646497	0.16	0.020	6648180
Indeno(1,2,3-cd)pyrene	mg/kg	0.18	0.13	0.14	0.050	6646497	0.13	0.050	6648180
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	0.050	6646497	<0.050	0.050	6648180
Benzo(g,h,i)perylene	mg/kg	0.20	0.15	0.16	0.050	6646497	0.15	0.050	6648180
Low Molecular Weight PAH`s	mg/kg	2.0		0.62	0.050	6627454	0.49	0.020	6627454
High Molecular Weight PAH`s	mg/kg	4.0		2.3	0.050	6627454	1.8	0.050	6627454
Total PAH	mg/kg	6.0		3.0	0.050	6627454	2.3	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	98	86	86		6646497	114		6648180
D8-ACENAPHTHYLENE (sur.)	%	92	86	84		6646497	106		6648180
D8-NAPHTHALENE (sur.)	%	95	88	86		6646497	106		6648180
TERPHENYL-D14 (sur.)	%	101	92	92		6646497	117		6648180

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) -
Duplicate exceeds acceptance criteria due to sample non homogeneity.
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(3) - Duplicate exceeds acceptance criteria due to sample non homogeneity.

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU7979	FU7980	FU7981	FU7982	FU7983	FU7984		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-94-130306**	**SP13-95-130306**	**SP13-96-130306**	**SP13-97-130306**	**SP13-98-130306**	**SP13-99-130306**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	14	4.6	3.4	3.3	3.3	4.3	0.10	6628524
Benzo[a]pyrene equivalency	N/A	1.0	0.38	0.29	0.27	0.28	0.36	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.074	0.067	0.048	0.036	0.037	0.10	0.010	6646497
2-Methylnaphthalene	mg/kg	0.067	0.051	0.048	0.037	0.037	0.072	0.020	6646497
Acenaphthylene	mg/kg	0.10	0.045	0.032	0.033	0.033	0.030	0.0050	6646497
Acenaphthene	mg/kg	0.055	0.051	0.046	0.026	0.027	0.092	0.0050	6646497
Fluorene	mg/kg	0.069	0.052	0.047	0.029	0.029	0.084	0.020	6646497
Phenanthrene	mg/kg	0.39	0.28	0.26	0.18	0.19	0.51	0.020	6646497
Anthracene	mg/kg	0.27	0.090	0.074	0.054	0.051	0.15	0.0040	6646497
Fluoranthene	mg/kg	1.0	0.53	0.40	0.33	0.35	0.58	0.020	6646497
Pyrene	mg/kg	1.0	0.52	0.40	0.33	0.35	0.53	0.020	6646497
Benzo(a)anthracene	mg/kg	0.95	0.22	0.16	0.15	0.16	0.23	0.020	6646497
Chrysene	mg/kg	1.1	0.26	0.21	0.18	0.19	0.26	0.020	6646497
Benzo(b&j)fluoranthene	mg/kg	1.1	0.35	0.25	0.25	0.25	0.32	0.020	6646497
Benzo(k)fluoranthene	mg/kg	0.34	0.11	0.093	0.081	0.083	0.11	0.020	6646497
Benzo(a)pyrene	mg/kg	0.67	0.26	0.19	0.18	0.19	0.25	0.020	6646497
Indeno(1,2,3-cd)pyrene	mg/kg	0.28	0.17	0.12	0.12	0.13	0.15	0.050	6646497
Dibenz(a,h)anthracene	mg/kg	0.071	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6646497
Benzo(g,h,i)perylene	mg/kg	0.28	0.19	0.14	0.14	0.14	0.18	0.050	6646497
Low Molecular Weight PAH`s	mg/kg	1.0	0.64	0.56	0.40	0.40	1.0	0.050	6627454
High Molecular Weight PAH`s	mg/kg	7.5	2.8	2.1	1.9	2.0	2.8	0.050	6627454
Total PAH	mg/kg	8.6	3.5	2.7	2.3	2.4	3.8	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	99	96	92	96	101	101		6646497
D8-ACENAPHTHYLENE (sur.)	%	89	94	88	97	95	93		6646497
D8-NAPHTHALENE (sur.)	%	91	96	89	100	98	96		6646497
TERPHENYL-D14 (sur.)	%	101	103	100	103	104	103		6646497

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU8294	FU8295	FU8296	FU8297	FU8298		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-100-01-130306**	**SP13-101-130306**	**SP13-102-130306**	**SP13-103-130306**	**SP13-104-130306**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	4.4	4.8	2.1	5.1	3.6	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.36	0.39	0.18	0.42	0.31	0.10	6628524
Polycyclic Aromatics								
Naphthalene	mg/kg	0.056	0.14	0.034	0.12	0.083	0.010	6646497
2-Methylnaphthalene	mg/kg	0.069	0.13	0.025	0.13	0.063	0.020	6646497
Acenaphthylene	mg/kg	0.042	0.036	0.021	0.031	0.038	0.0050	6646497
Acenaphthene	mg/kg	0.025	0.11	0.026	0.13	0.060	0.0050	6646497
Fluorene	mg/kg	0.046	0.14	0.026	0.15	0.067	0.020	6646497
Phenanthrene	mg/kg	0.27	0.67	0.15	0.77	0.29	0.020	6646497
Anthracene	mg/kg	0.077	0.17	0.037	0.20	0.068	0.0040	6646497
Fluoranthene	mg/kg	0.47	0.55	0.23	0.61	0.42	0.020	6646497
Pyrene	mg/kg	0.46	0.59	0.22	0.66	0.40	0.020	6646497
Benzo(a)anthracene	mg/kg	0.22	0.28	0.094	0.29	0.18	0.020	6646497
Chrysene	mg/kg	0.27	0.33	0.12	0.34	0.21	0.020	6646497
Benzo(b&j)fluoranthene	mg/kg	0.31	0.33	0.16	0.36	0.28	0.020	6646497
Benzo(k)fluoranthene	mg/kg	0.12	0.12	0.050	0.13	0.082	0.020	6646497
Benzo(a)pyrene	mg/kg	0.25	0.28	0.11	0.29	0.21	0.020	6646497
Indeno(1,2,3-cd)pyrene	mg/kg	0.16	0.15	0.075	0.16	0.14	0.050	6646497
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6646497
Benzo(g,h,i)perylene	mg/kg	0.18	0.17	0.085	0.19	0.16	0.050	6646497
Low Molecular Weight PAH`s	mg/kg	0.58	1.4	0.32	1.5	0.67	0.050	6627454
High Molecular Weight PAH`s	mg/kg	2.6	3.0	1.2	3.3	2.2	0.050	6627454
Total PAH	mg/kg	3.2	4.4	1.6	4.8	2.9	0.050	6627454
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	85	83	89	89	85		6646497
D8-ACENAPHTHYLENE (sur.)	%	84	91	83	89	89		6646497
D8-NAPHTHALENE (sur.)	%	85	92	84	90	90		6646497
TERPHENYL-D14 (sur.)	%	89	92	92	96	96		6646497

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU8299	FU8300	FU8301	FU8302	FU8312		
Sampling Date		2013/03/06	2013/03/06	2013/03/06	2013/03/06	2013/03/06		
	UNITS	**SP13-105-130306**	**SP13-106-130306**	**SP13-107-130306**	**SP13-108-130306**	**SP13-109-130306**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	3.9	3.8	3.3	4.5	5.3	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.33	0.34	0.28	0.39	0.43	0.10	6628524
Polycyclic Aromatics								
Naphthalene	mg/kg	0.068	0.056	0.038	0.034	0.048	0.010	6646497
2-Methylnaphthalene	mg/kg	0.061	0.048	0.040	0.033	0.047	0.020	6646497
Acenaphthylene	mg/kg	0.038	0.033	0.030	0.047	0.063	0.0050	6646497
Acenaphthene	mg/kg	0.054	0.045	0.040	0.026	0.037	0.0050	6646497
Fluorene	mg/kg	0.058	0.043	0.039	0.031	0.051	0.020	6646497
Phenanthrene	mg/kg	0.28	0.24	0.23	0.25	0.38	0.020	6646497
Anthracene	mg/kg	0.075	0.066	0.063	0.062	0.10	0.0040	6646497
Fluoranthene	mg/kg	0.38	0.39	0.36	0.37	0.61	0.020	6646497
Pyrene	mg/kg	0.38	0.43	0.37	0.41	0.59	0.020	6646497
Benzo(a)anthracene	mg/kg	0.18	0.19	0.15	0.18	0.27	0.020	6646497
Chrysene	mg/kg	0.21	0.22	0.18	0.23	0.31	0.020	6646497
Benzo(b&j)fluoranthene	mg/kg	0.30	0.27	0.24	0.35	0.38	0.020	6646497
Benzo(k)fluoranthene	mg/kg	0.097	0.10	0.092	0.11	0.14	0.020	6646497
Benzo(a)pyrene	mg/kg	0.23	0.24	0.19	0.28	0.30	0.020	6646497
Indeno(1,2,3-cd)pyrene	mg/kg	0.15	0.14	0.12	0.17	0.18	0.050	6646497
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6646497
Benzo(g,h,i)perylene	mg/kg	0.16	0.17	0.14	0.18	0.18	0.050	6646497
Low Molecular Weight PAH`s	mg/kg	0.63	0.53	0.48	0.49	0.73	0.050	6627454
High Molecular Weight PAH`s	mg/kg	2.3	2.3	2.0	2.5	3.2	0.050	6627454
Total PAH	mg/kg	2.9	2.8	2.5	3.0	3.9	0.050	6627454
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	87	89	102	102	86		6646497
D8-ACENAPHTHYLENE (sur.)	%	92	91	92	94	92		6646497
D8-NAPHTHALENE (sur.)	%	94	91	93	96	94		6646497
TERPHENYL-D14 (sur.)	%	96	98	104	104	96		6646497

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU8313	FU8314			FU8315	FU8368		
Sampling Date		2013/03/06	2013/03/06			2013/03/06	2013/03/06		
	UNITS	**SP13-110-01-130306**	**SP13-111-130306**	**RDL**	**QC Batch**	**SP13-112-130306**	**SP13-100-130306**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	5.9	2.3	0.10	6628524	2.8	2.3	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.50	0.20	0.10	6628524	0.24	0.20	0.10	6628524
Polycyclic Aromatics									
Naphthalene	mg/kg	0.040	0.026	0.010	6646497	0.036	0.026	0.010	6648180
2-Methylnaphthalene	mg/kg	0.038	0.025	0.020	6646497	0.032	0.027	0.020	6648180
Acenaphthylene	mg/kg	0.052	0.025	0.0050	6646497	0.033	0.025	0.0050	6648180
Acenaphthene	mg/kg	0.059	0.019	0.0050	6646497	0.026	0.024	0.0050	6648180
Fluorene	mg/kg	0.064	0.023	0.020	6646497	0.029	0.025	0.020	6648180
Phenanthrene	mg/kg	0.59	0.15	0.020	6646497	0.18	0.15	0.020	6648180
Anthracene	mg/kg	0.12	0.040	0.0040	6646497	0.053	0.041	0.0040	6648180
Fluoranthene	mg/kg	0.78	0.27	0.020	6646497	0.30	0.24	0.020	6648180
Pyrene	mg/kg	0.74	0.25	0.020	6646497	0.31	0.25	0.020	6648180
Benzo(a)anthracene	mg/kg	0.29	0.097	0.020	6646497	0.13	0.10	0.020	6648180
Chrysene	mg/kg	0.34	0.14	0.020	6646497	0.16	0.13	0.020	6648180
Benzo(b&j)fluoranthene	mg/kg	0.43	0.18	0.020	6646497	0.20	0.17	0.020	6648180
Benzo(k)fluoranthene	mg/kg	0.15	0.060	0.020	6646497	0.071	0.058	0.020	6648180
Benzo(a)pyrene	mg/kg	0.33	0.13	0.020	6646497	0.16	0.14	0.020	6648180
Indeno(1,2,3-cd)pyrene	mg/kg	0.20	0.084	0.050	6646497	0.087	0.080	0.050	6648180
Dibenz(a,h)anthracene	mg/kg	0.058	<0.050	0.050	6646497	<0.050	<0.050	0.050	6648180
Benzo(g,h,i)perylene	mg/kg	0.21	0.090	0.050	6646497	0.093	0.088	0.050	6648180
Low Molecular Weight PAH`s	mg/kg	0.96	0.30	0.050	6627454	0.39	0.32	0.020	6627454
High Molecular Weight PAH`s	mg/kg	3.8	1.4	0.050	6627454	1.6	1.4	0.050	6627454
Total PAH	mg/kg	4.8	1.7	0.050	6627454	2.0	1.7	0.050	6627454
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	97	91		6646497	91	94		6648180
D8-ACENAPHTHYLENE (sur.)	%	93	90		6646497	83	86		6648180
D8-NAPHTHALENE (sur.)	%	95	93		6646497	81	84		6648180
TERPHENYL-D14 (sur.)	%	100	99		6646497	94	97		6648180

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FU8370		
Sampling Date		2013/03/06		
	UNITS	**SP13-110-130306**	**RDL**	**QC Batch**
Calculated Parameters				
Index of Additive Cancer Risk(IARC)	N/A	7.8	0.10	6628524
Benzo[a]pyrene equivalency	N/A	0.67	0.10	6628524
Polycyclic Aromatics				
Naphthalene	mg/kg	0.18	0.010	6648180
2-Methylnaphthalene	mg/kg	0.22	0.020	6648180
Acenaphthylene	mg/kg	0.12	0.0050	6648180
Acenaphthene	mg/kg	0.037	0.0050	6648180
Fluorene	mg/kg	0.039	0.020	6648180
Phenanthrene	mg/kg	0.27	0.020	6648180
Anthracene	mg/kg	0.19	0.0040	6648180
Fluoranthene	mg/kg	0.67	0.020	6648180
Pyrene	mg/kg	0.79	0.020	6648180
Benzo(a)anthracene	mg/kg	0.42	0.020	6648180
Chrysene	mg/kg	0.49	0.020	6648180
Benzo(b&j)fluoranthene	mg/kg	0.55	0.020	6648180
Benzo(k)fluoranthene	mg/kg	0.19	0.020	6648180
Benzo(a)pyrene	mg/kg	0.46	0.020	6648180
Indeno(1,2,3-cd)pyrene	mg/kg	0.25	0.050	6648180
Dibenz(a,h)anthracene	mg/kg	0.064	0.050	6648180
Benzo(g,h,i)perylene	mg/kg	0.24	0.050	6648180
Low Molecular Weight PAH`s	mg/kg	1.0	0.020	6627454
High Molecular Weight PAH`s	mg/kg	4.5	0.050	6627454
Total PAH	mg/kg	5.5	0.050	6627454
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	87		6648180
D8-ACENAPHTHYLENE (sur.)	%	79		6648180
D8-NAPHTHALENE (sur.)	%	78		6648180
TERPHENYL-D14 (sur.)	%	90		6648180

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU7976		FU7977		FU7978		FU7979	FU7980		
Sampling Date		2013/03/06		2013/03/06		2013/03/06		2013/03/06	2013/03/06		
	UNITS	**SP13-91-130306**	**RDL**	**SP13-92-130306**	**RDL**	**SP13-93-130306**	**RDL**	**SP13-94-130306**	**SP13-95-130306**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	74	10	75	10	51	10	60	53	10	6648234
Soluble Chloride (Cl)	mg/L	43.7	5.0	51.1	5.0	49.2	5.0	51.2	53.3	5.0	6648232
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	15.2	1.7	18.8	1.8	18.6	1.9	18.6	18.7	1.8	6628642
Soluble Sodium (Na)	mg/kg	11.2	1.7	11.9	1.8	12.1	1.9	12.3	11.9	1.8	6628642
Soluble Parameters											
Soluble Conductivity	uS/cm	487	1.0	502	1.0	483	1.0	534	506	1.0	6643866
Soluble pH	pH Units	7.15	N/A	7.09	N/A	7.23	N/A	7.23	7.13	N/A	6643865
Wet Soluble Calcium (Ca)	mg/L	70.6	5.0	68.8	5.0	66.2	5.0	68.5	67.5	5.0	6647338
Saturation %	%	34.9	1.0	36.7	1.0	37.8	1.0	36.3	35.1	1.0	6643862
Wet Soluble Magnesium (Mg)	mg/L	24.0	5.0	25.7	5.0	22.5	5.0	28.0	24.1	5.0	6647338
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6647338
Wet Soluble Sodium (Na)	mg/L	32.0	5.0	32.5	5.0	32.1	5.0	34.0	33.8	5.0	6647338
Wet Soluble Sulphur (S)	mg/L	38	30	38	30	36	30	40	36	30	6647338
Sodium Adsorption Ratio	N/A	0.84	0.10	0.85	0.10	0.87	0.10	0.87	0.90	0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU7980			FU7981		FU7982	FU7983		FU7984		
Sampling Date		2013/03/06			2013/03/06		2013/03/06	2013/03/06		2013/03/06		
	UNITS	**SP13-95-130306 Lab-Dup**	**RDL**	**QC Batch**	**SP13-96-130306**	**RDL**	**SP13-97-130306**	**SP13-98-130306**	**RDL**	**SP13-99-130306**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	53	10	6648234	67	10	67	61	10	60	10	6648234
Soluble Chloride (Cl)	mg/L	55.1	5.0	6648232	47.8	5.0	49.3	36.4	5.0	53.5	5.0	6648232
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg		1.8	6628642	17.9	1.9	18.0	13.2	1.8	20.9	1.9	6628642
Soluble Sodium (Na)	mg/kg		1.8	6628642	11.3	1.9	11.5	9.6	1.8	11.6	1.9	6628642
Soluble Parameters												
Soluble Conductivity	uS/cm	504	1.0	6643866	517	1.0	537	462	1.0	535	1.0	6643866
Soluble pH	pH Units	7.14	N/A	6643865	7.12	N/A	7.13	7.03	N/A	7.03	N/A	6643865
Wet Soluble Calcium (Ca)	mg/L	70.7	5.0	6647338	68.3	5.0	69.0	61.7	5.0	74.0	5.0	6647354
Saturation %	%	35.1	1.0	6643862	37.4	1.0	36.4	36.4	1.0	39.0	1.0	6643862
Wet Soluble Magnesium (Mg)	mg/L	25.2	5.0	6647338	21.4	5.0	18.4	18.8	5.0	15.3	5.0	6647354
Wet Soluble Potassium (K)	mg/L	<20	20	6647338	<20	20	<20	<20	20	<20	20	6647354
Wet Soluble Sodium (Na)	mg/L	33.2	5.0	6647338	30.1	5.0	31.6	26.5	5.0	29.7	5.0	6647354
Wet Soluble Sulphur (S)	mg/L	36	30	6647338	37	30	40	31	30	34	30	6647354
Sodium Adsorption Ratio	N/A		0.10	6628641	0.82	0.10	0.87	0.76	0.10	0.82	0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU8294		FU8295		FU8296		FU8297		
Sampling Date		2013/03/06		2013/03/06		2013/03/06		2013/03/06		
	UNITS	**SP13-100-01-130306**	**RDL**	**SP13-101-130306**	**RDL**	**SP13-102-130306**	**RDL**	**SP13-103-130306**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	69	10	50	10	47	10	93	10	6648234
Soluble Chloride (Cl)	mg/L	35.8	5.0	39.7	5.0	51.6	5.0	54.7	5.0	6648232
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	14.3	2.0	15.1	1.9	20.7	2.0	20.6	1.9	6628642
Soluble Sodium (Na)	mg/kg	9.8	2.0	10.5	1.9	11.2	2.0	13.0	1.9	6628642
Soluble Parameters										
Soluble Conductivity	uS/cm	456	1.0	447	1.0	527	1.0	589	1.0	6643866
Soluble pH	pH Units	7.17	N/A	6.97	N/A	7.11	N/A	7.21	N/A	6643865
Wet Soluble Calcium (Ca)	mg/L	65.1	5.0	59.9	5.0	74.4	5.0	81.0	5.0	6647354
Saturation %	%	39.9	1.0	37.9	1.0	40.0	1.0	37.7	1.0	6643862
Wet Soluble Magnesium (Mg)	mg/L	16.7	5.0	16.3	5.0	18.5	5.0	17.2	5.0	6647354
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6647354
Wet Soluble Sodium (Na)	mg/L	24.5	5.0	27.6	5.0	27.9	5.0	34.6	5.0	6647354
Wet Soluble Sulphur (S)	mg/L	31	30	<30	30	33	30	46	30	6647354
Sodium Adsorption Ratio	N/A	0.70	0.10	0.82	0.10	0.75	0.10	0.91	0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU8298		FU8299		FU8300		FU8301		FU8302		
Sampling Date		2013/03/06		2013/03/06		2013/03/06		2013/03/06		2013/03/06		
	UNITS	**SP13-104-130306**	**RDL**	**SP13-105-130306**	**RDL**	**SP13-106-130306**	**RDL**	**SP13-107-130306**	**RDL**	**SP13-108-130306**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	65	10	58	10	59	10	59	10	56	10	6648237
Soluble Chloride (Cl)	mg/L	48.3	5.0	33.1	5.0	43.4	5.0	73.1	5.0	48.3	5.0	6648236
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	17.8	1.8	12.9	2.0	15.8	1.8	30.0	2.1	16.5	1.7	6628642
Soluble Sodium (Na)	mg/kg	10.6	1.8	9.5	2.0	9.9	1.8	13.0	2.1	8.9	1.7	6628642
Soluble Parameters												
Soluble Conductivity	uS/cm	511	1.0	448	1.0	486	1.0	613	1.0	505	1.0	6643903
Soluble pH	pH Units	7.16	N/A	7.09	N/A	7.14	N/A	7.25	N/A	7.24	N/A	6643894
Wet Soluble Calcium (Ca)	mg/L	67.4	5.0	62.2	5.0	70.1	5.0	84.0	5.0	74.0	5.0	6647354
Saturation %	%	36.9	1.0	39.1	1.0	36.4	1.0	41.0	1.0	34.2	1.0	6643893
Wet Soluble Magnesium (Mg)	mg/L	18.8	5.0	22.0	5.0	19.8	5.0	18.1	5.0	22.8	5.0	6647354
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6647354
Wet Soluble Sodium (Na)	mg/L	28.7	5.0	24.4	5.0	27.3	5.0	31.7	5.0	26.1	5.0	6647354
Wet Soluble Sulphur (S)	mg/L	39	30	<30	30	33	30	37	30	36	30	6647354
Sodium Adsorption Ratio	N/A	0.80	0.10	0.68	0.10	0.74	0.10	0.82	0.10	0.68	0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU8312		FU8313		FU8314		
Sampling Date		2013/03/06		2013/03/06		2013/03/06		
	UNITS	**SP13-109-130306**	**RDL**	**SP13-110-01-130306**	**RDL**	**SP13-111-130306**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	56	10	61	10	63	10	6648237
Soluble Chloride (Cl)	mg/L	49.6	5.0	67.8	5.0	55.8	5.0	6648236
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	18.0	1.8	23.6	1.7	21.4	1.9	6628642
Soluble Sodium (Na)	mg/kg	9.1	1.8	10.5	1.7	11.4	1.9	6628642
Soluble Parameters								
Soluble Conductivity	uS/cm	508	1.0	597	1.0	549	1.0	6643903
Soluble pH	pH Units	6.95	N/A	7.24	N/A	7.19	N/A	6643894
Wet Soluble Calcium (Ca)	mg/L	68.7	5.0	77.7	5.0	74.6	5.0	6647354
Saturation %	%	36.2	1.0	34.8	1.0	38.3	1.0	6643893
Wet Soluble Magnesium (Mg)	mg/L	23.6	5.0	26.2	5.0	23.7	5.0	6647354
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	6647354
Wet Soluble Sodium (Na)	mg/L	25.0	5.0	30.3	5.0	29.8	5.0	6647354
Wet Soluble Sulphur (S)	mg/L	33	30	44	30	43	30	6647354
Sodium Adsorption Ratio	N/A	0.66	0.10	0.76	0.10	0.77	0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FU8315		FU8368		FU8370	FU8370		
Sampling Date		2013/03/06		2013/03/06		2013/03/06	2013/03/06		
	UNITS	**SP13-112-130306**	**RDL**	**SP13-100-130306**	**RDL**	**SP13-110-130306**	**SP13-110-130306 Lab-Dup**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	43	10	61	10	53	54	10	6648237
Soluble Chloride (Cl)	mg/L	68.8	5.0	38.4	5.0	71.2	69.7	5.0	6648236
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	26.4	1.9	15.6	2.0	24.4		1.7	6628642
Soluble Sodium (Na)	mg/kg	12.5	1.9	10.6	2.0	10.8		1.7	6628642
Soluble Parameters									
Soluble Conductivity	uS/cm	586	1.0	482	1.0	556	530	1.0	6643903
Soluble pH	pH Units	7.20	N/A	6.96	N/A	7.20	7.21	N/A	6643894
Wet Soluble Calcium (Ca)	mg/L	79.7	5.0	69.0	5.0	70.0	65.6	5.0	6647354
Saturation %	%	38.4	1.0	40.5	1.0	34.3	34.3	1.0	6643893
Wet Soluble Magnesium (Mg)	mg/L	25.1	5.0	21.5	5.0	25.3	25.3	5.0	6647354
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	20	6647354
Wet Soluble Sodium (Na)	mg/L	32.6	5.0	26.1	5.0	31.4	33.3	5.0	6647354
Wet Soluble Sulphur (S)	mg/L	40	30	<30	30	40	39	30	6647354
Sodium Adsorption Ratio	N/A	0.82	0.10	0.70	0.10	0.82		0.10	6628641

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	1.7°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - reported TCLP parameters have been corrected. KD4 - March 20/13

Maxxam

Success Through Science®

Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6634768	Moisture	2013/03/11					<0.30	%	3.9	20		
6635073	Total Antimony (Sb)	2013/03/11	102	75 - 125	101	75 - 125	<0.10	mg/kg	NC	30	85	70 - 130
6635073	Total Arsenic (As)	2013/03/11	108	75 - 125	105	75 - 125	0.66, RDL=0.50	mg/kg	0.7	30	92	70 - 130
6635073	Total Barium (Ba)	2013/03/11	NC	75 - 125	102	75 - 125	<0.10	mg/kg	2.0	35	99	70 - 130
6635073	Total Beryllium (Be)	2013/03/11	106	75 - 125	105	75 - 125	<0.40	mg/kg	NC	30		
6635073	Total Cadmium (Cd)	2013/03/11	111	75 - 125	109	75 - 125	<0.050	mg/kg	6.1	30	93	70 - 130
6635073	Total Chromium (Cr)	2013/03/11	NC	75 - 125	103	75 - 125	<1.0	mg/kg	0.5	30	95	70 - 130
6635073	Total Cobalt (Co)	2013/03/11	101	75 - 125	105	75 - 125	<0.30	mg/kg	1.6	30	87	70 - 130
6635073	Total Copper (Cu)	2013/03/11	105	75 - 125	105	75 - 125	<0.50	mg/kg	2.9	30	84	70 - 130
6635073	Total Lead (Pb)	2013/03/11	102	75 - 125	103	75 - 125	0.11, RDL=0.10	mg/kg	1.3	35	94	70 - 130
6635073	Total Lithium (Li)	2013/03/11	107	75 - 125	107	75 - 125	<5.0	mg/kg				
6635073	Total Manganese (Mn)	2013/03/11	NC	75 - 125	106	75 - 125	<0.20	mg/kg	0.9	30	97	70 - 130
6635073	Total Mercury (Hg)	2013/03/11	109	75 - 125	102	75 - 125	<0.050	mg/kg	NC	35	104	70 - 130
6635073	Total Molybdenum (Mo)	2013/03/11	104	75 - 125	105	75 - 125	<0.10	mg/kg	8.2	35	104	70 - 130
6635073	Total Nickel (Ni)	2013/03/11	NC	75 - 125	107	75 - 125	<0.80	mg/kg	1.9	30	87	70 - 130
6635073	Total Selenium (Se)	2013/03/11	117	75 - 125	110	75 - 125	<0.50	mg/kg	NC	30		
6635073	Total Silver (Ag)	2013/03/11	100	75 - 125	99	75 - 125	<0.050	mg/kg	NC	35		
6635073	Total Strontium (Sr)	2013/03/11	NC	75 - 125	105	75 - 125	<0.10	mg/kg	1.4	35	105	70 - 130
6635073	Total Thallium (Tl)	2013/03/11	101	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	89	70 - 130
6635073	Total Tin (Sn)	2013/03/11	99	75 - 125	105	75 - 125	<0.10	mg/kg	NC	35		
6635073	Total Titanium (Ti)	2013/03/11	NC	75 - 125	104	75 - 125	<1.0	mg/kg	0.5	35	90	70 - 130
6635073	Total Uranium (U)	2013/03/11	100	75 - 125	101	75 - 125	<0.050	mg/kg			88	70 - 130
6635073	Total Vanadium (V)	2013/03/11	NC	75 - 125	100	75 - 125	<2.0	mg/kg	1.5	30	101	70 - 130
6635073	Total Zinc (Zn)	2013/03/11	NC	75 - 125	105	75 - 125	<1.0	mg/kg	3.2	30	92	70 - 130
6635073	Total Aluminum (Al)	2013/03/11					<100	mg/kg	1.3	35	102	70 - 130
6635073	Total Calcium (Ca)	2013/03/11					<100	mg/kg	6.3	30	91	70 - 130
6635073	Total Iron (Fe)	2013/03/11					<100	mg/kg	0.6	30	89	70 - 130
6635073	Total Magnesium (Mg)	2013/03/11					<100	mg/kg	1.8	30	91	70 - 130
6635073	Total Phosphorus (P)	2013/03/11					<10	mg/kg	0.6	30	86	70 - 130
6635073	Total Bismuth (Bi)	2013/03/11					<0.10	mg/kg	NC	30		
6635073	Total Potassium (K)	2013/03/11					<100	mg/kg	0.9	35		
6635073	Total Sodium (Na)	2013/03/11					<100	mg/kg	NC	35		
6635073	Total Zirconium (Zr)	2013/03/11					<0.50	mg/kg	1.2	30		
6635074	Soluble (2:1) pH	2013/03/11			102	96 - 104			0.4	20		
6635076	Total Antimony (Sb)	2013/03/11	95	75 - 125	102	75 - 125	<0.10	mg/kg	NC	30	85	70 - 130
6635076	Total Arsenic (As)	2013/03/11	109	75 - 125	108	75 - 125	0.58, RDL=0.50	mg/kg	NC	30	93	70 - 130
6635076	Total Barium (Ba)	2013/03/11	NC	75 - 125	101	75 - 125	<0.10	mg/kg	0.5	35	102	70 - 130
6635076	Total Beryllium (Be)	2013/03/11	118	75 - 125	91	75 - 125	<0.40	mg/kg	NC	30		
6635076	Total Cadmium (Cd)	2013/03/11	113	75 - 125	110	75 - 125	<0.050	mg/kg	NC	30	97	70 - 130

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6635076	Total Chromium (Cr)	2013/03/11	92	75 - 125	102	75 - 125	<1.0	mg/kg	2.0	30	100	70 - 130
6635076	Total Cobalt (Co)	2013/03/11	101	75 - 125	104	75 - 125	<0.30	mg/kg	0.3	30	89	70 - 130
6635076	Total Copper (Cu)	2013/03/11	NC	75 - 125	107	75 - 125	<0.50	mg/kg	0.5	30	83	70 - 130
6635076	Total Lead (Pb)	2013/03/11	107	75 - 125	103	75 - 125	<0.10	mg/kg	0.1	35	100	70 - 130
6635076	Total Lithium (Li)	2013/03/11	106	75 - 125	99	75 - 125	<5.0	mg/kg	NC	30		
6635076	Total Manganese (Mn)	2013/03/11	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.6	30	100	70 - 130
6635076	Total Mercury (Hg)	2013/03/11	111	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35	100	70 - 130
6635076	Total Molybdenum (Mo)	2013/03/11	104	75 - 125	103	75 - 125	<0.10	mg/kg	2.9	35	111	70 - 130
6635076	Total Nickel (Ni)	2013/03/11	103	75 - 125	106	75 - 125	<0.80	mg/kg	2.1	30	85	70 - 130
6635076	Total Selenium (Se)	2013/03/11	123	75 - 125	122	75 - 125	<0.50	mg/kg	NC	30		
6635076	Total Silver (Ag)	2013/03/11	99	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35		
6635076	Total Strontium (Sr)	2013/03/11	NC	75 - 125	107	75 - 125	<0.10	mg/kg	0.9	35	106	70 - 130
6635076	Total Thallium (Tl)	2013/03/11	105	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	95	70 - 130
6635076	Total Tin (Sn)	2013/03/11	96	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
6635076	Total Titanium (Ti)	2013/03/11	NC	75 - 125	105	75 - 125	<1.0	mg/kg	1.2	35	96	70 - 130
6635076	Total Uranium (U)	2013/03/11	107	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	93	70 - 130
6635076	Total Vanadium (V)	2013/03/11	NC	75 - 125	101	75 - 125	<2.0	mg/kg	0.3	30	104	70 - 130
6635076	Total Zinc (Zn)	2013/03/11	NC	75 - 125	121	75 - 125	<1.0	mg/kg	1.8	30	92	70 - 130
6635076	Total Aluminum (Al)	2013/03/11					<100	mg/kg	0.7	35	103	70 - 130
6635076	Total Calcium (Ca)	2013/03/11					<100	mg/kg	0.3	30	94	70 - 130
6635076	Total Iron (Fe)	2013/03/11					<100	mg/kg	0.5	30	94	70 - 130
6635076	Total Magnesium (Mg)	2013/03/11					<100	mg/kg	1.1	30	95	70 - 130
6635076	Total Phosphorus (P)	2013/03/11					<10	mg/kg	0.9	30	90	70 - 130
6635076	Total Bismuth (Bi)	2013/03/11					<0.10	mg/kg	NC	30		
6635076	Total Potassium (K)	2013/03/11					<100	mg/kg	0.9	35		
6635076	Total Sodium (Na)	2013/03/11					<100	mg/kg	NC	35		
6635076	Total Zirconium (Zr)	2013/03/11					<0.50	mg/kg	NC	30		
6635077	Soluble (2:1) pH	2013/03/11			101	96 - 104			0.3	20		
6639845	1,4-Difluorobenzene (sur.)	2013/03/12	95	70 - 130	96	70 - 130	97	%				
6639845	4-BROMOFLUOROBENZENE (sur.)	2013/03/12	102	70 - 130	101	70 - 130	97	%				
6639845	D10-ETHYLBENZENE (sur.)	2013/03/12	103	50 - 130	95	50 - 130	101	%				
6639845	D4-1,2-DICHLOROETHANE (sur.)	2013/03/12	103	70 - 130	105	70 - 130	104	%				
6639845	Benzene	2013/03/12	97	60 - 140	97	60 - 140	<0.0050	mg/kg	NC (1)	40		
6639845	Toluene	2013/03/12	122	60 - 140	120	60 - 140	<0.020	mg/kg	NC (1)	40		
6639845	Ethylbenzene	2013/03/12	112	60 - 140	109	60 - 140	<0.010	mg/kg	NC (1)	40		
6639845	m & p-Xylene	2013/03/12	112	60 - 140	109	60 - 140	<0.040	mg/kg	NC (1)	40		
6639845	o-Xylene	2013/03/12	112	60 - 140	110	60 - 140	<0.040	mg/kg	NC (1)	40		
6639845	VH C6-C10	2013/03/12			94	60 - 140	<10	mg/kg	NC (1)	40		
6639845	(C6-C10)	2013/03/12			95	60 - 140	<10	mg/kg				

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Maxxam Job #: B318225
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6639845	Methyl-tert-butylether(MTBE)	2013/03/12					<0.10	mg/kg	NC(1)	40		
6639845	Styrene	2013/03/12					<0.030	mg/kg	NC(1)	40		
6639845	Xylenes (Total)	2013/03/12					<0.040	mg/kg	NC	40		
6641584	Moisture	2013/03/13					<0.30	%	12.5	20		
6641895	Moisture	2013/03/13					<0.30	%	1.2	20		
6641902	Moisture	2013/03/13					<0.30	%	4.9	20		
6643862	Saturation %	2013/03/13			105	80 - 120	<1.0	%	0.1	30		
6643865	Soluble pH	2013/03/13			100	97 - 103			0.1	20		
6643866	Soluble Conductivity	2013/03/13			93	70 - 130	<1.0	uS/cm	0.4	35		
6643893	Saturation %	2013/03/13			105	80 - 120	<1.0	%	0	30		
6643894	Soluble pH	2013/03/13			100	97 - 103			0.1	20		
6643903	Soluble Conductivity	2013/03/13			93	70 - 130	<1.0	uS/cm	4.7	35		
6646209	O-TERPHENYL (sur.)	2013/03/14	95	50 - 130	101	50 - 130	109	%				
6646209	F2 (C10-C16 Hydrocarbons)	2013/03/14	91	50 - 130	91	80 - 120	<10	mg/kg	NC	40		
6646209	F3 (C16-C34 Hydrocarbons)	2013/03/14	98	50 - 130	97	80 - 120	<10	mg/kg	14.4	40		
6646209	F4 (C34-C50 Hydrocarbons)	2013/03/14	98	50 - 130	96	80 - 120	<10	mg/kg	11.6	40		
6646209	Reached Baseline at C50	2013/03/14							NC	50		
6646497	D10-ANTHRACENE (sur.)	2013/03/13	82	60 - 130	89	60 - 130	100	%				
6646497	D8-ACENAPHTHYLENE (sur.)	2013/03/13	89	50 - 130	90	50 - 130	101	%				
6646497	D8-NAPHTHALENE (sur.)	2013/03/13	90	50 - 130	94	50 - 130	104	%				
6646497	TERPHENYL-D14 (sur.)	2013/03/13	89	60 - 130	96	60 - 130	105	%				
6646497	Naphthalene	2013/03/13	85	50 - 130	90	50 - 130	<0.010	mg/kg	NC	50		
6646497	2-Methylnaphthalene	2013/03/13	84	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6646497	Acenaphthylene	2013/03/13	85	50 - 130	89	50 - 130	<0.0050	mg/kg	53.5(2)	50		
6646497	Acenaphthene	2013/03/13	87	50 - 130	92	50 - 130	<0.0050	mg/kg	105(2)	50		
6646497	Fluorene	2013/03/13	85	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6646497	Phenanthrene	2013/03/13	76	60 - 130	86	60 - 130	<0.020	mg/kg	139(2)	50		
6646497	Anthracene	2013/03/13	85	60 - 130	97	60 - 130	<0.0040	mg/kg	72.5(2)	50		
6646497	Fluoranthene	2013/03/13	81	60 - 130	91	60 - 130	<0.020	mg/kg	99.8(2)	50		
6646497	Pyrene	2013/03/13	81	60 - 130	95	60 - 130	<0.020	mg/kg	80.2(2)	50		
6646497	Benzo(a)anthracene	2013/03/13	78	60 - 130	87	60 - 130	<0.020	mg/kg	29.2	50		
6646497	Chrysene	2013/03/13	77	60 - 130	87	60 - 130	<0.020	mg/kg	61.7(2)	50		
6646497	Benzo(b&j)fluoranthene	2013/03/13	83	60 - 130	88	60 - 130	<0.020	mg/kg	45.5	50		
6646497	Benzo(k)fluoranthene	2013/03/13	85	60 - 130	94	60 - 130	<0.020	mg/kg	NC	50		
6646497	Benzo(a)pyrene	2013/03/13	86	60 - 130	94	60 - 130	<0.020	mg/kg	25.7	50		
6646497	Indeno(1,2,3-cd)pyrene	2013/03/13	90	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
6646497	Dibenz(a,h)anthracene	2013/03/13	92	60 - 130	90	60 - 130	<0.050	mg/kg	NC	50		
6646497	Benzo(g,h,i)perylene	2013/03/13	86	60 - 130	88	60 - 130	<0.050	mg/kg	NC	50		
6647338	Wet Soluble Calcium (Ca)	2013/03/13					<5.0	mg/L	4.6	30		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6647338	Wet Soluble Magnesium (Mg)	2013/03/13					<5.0	mg/L	NC	30		
6647338	Wet Soluble Potassium (K)	2013/03/13					<20	mg/L	NC	30		
6647338	Wet Soluble Sodium (Na)	2013/03/13					<5.0	mg/L	1.8	30		
6647338	Wet Soluble Sulphur (S)	2013/03/13					<30	mg/L	NC	30		
6647354	Wet Soluble Calcium (Ca)	2013/03/14					<5.0	mg/L	6.5	30		
6647354	Wet Soluble Magnesium (Mg)	2013/03/14					<5.0	mg/L	0.1	30		
6647354	Wet Soluble Potassium (K)	2013/03/14					<20	mg/L	NC	30		
6647354	Wet Soluble Sodium (Na)	2013/03/14					<5.0	mg/L	6.0	30		
6647354	Wet Soluble Sulphur (S)	2013/03/14					<30	mg/L	NC	30		
6648142	O-TERPHENYL (sur.)	2013/03/14			108	50 - 130	87	%				
6648142	EPH (C10-C19)	2013/03/14			120	50 - 130	<100	mg/kg	NC	40		
6648142	EPH (C19-C32)	2013/03/14			116	50 - 130	<100	mg/kg	NC	40		
6648180	D10-ANTHRACENE (sur.)	2013/03/14	98	60 - 130	115	60 - 130	101	%				
6648180	D8-ACENAPHTHYLENE (sur.)	2013/03/14	92	50 - 130	104	50 - 130	92	%				
6648180	D8-NAPHTHALENE (sur.)	2013/03/14	91	50 - 130	103	50 - 130	91	%				
6648180	TERPHENYL-D14 (sur.)	2013/03/14	100	60 - 130	117	60 - 130	103	%				
6648180	Naphthalene	2013/03/14	87	50 - 130	98	50 - 130	<0.010	mg/kg	67.4(2)	50		
6648180	2-Methylnaphthalene	2013/03/14	88	50 - 130	99	50 - 130	<0.020	mg/kg	NC	50		
6648180	Acenaphthylene	2013/03/14	87	50 - 130	103	50 - 130	<0.0050	mg/kg	116(2)	50		
6648180	Acenaphthene	2013/03/14	70	50 - 130	108	50 - 130	<0.0050	mg/kg	123(2)	50		
6648180	Fluorene	2013/03/14	73	50 - 130	107	50 - 130	<0.020	mg/kg	142(2)	50		
6648180	Phenanthrene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	160(2)	50		
6648180	Anthracene	2013/03/14	NC	60 - 130	118	60 - 130	<0.0040	mg/kg	170(2)	50		
6648180	Fluoranthene	2013/03/14	NC	60 - 130	115	60 - 130	<0.020	mg/kg	140(2)	50		
6648180	Pyrene	2013/03/14	NC	60 - 130	112	60 - 130	<0.020	mg/kg	147(2)	50		
6648180	Benzo(a)anthracene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	154(2)	50		
6648180	Chrysene	2013/03/14	NC	60 - 130	109	60 - 130	<0.020	mg/kg	145(2)	50		
6648180	Benzo(b&j)fluoranthene	2013/03/14	NC	60 - 130	108	60 - 130	<0.020	mg/kg	143(2)	50		
6648180	Benzo(k)fluoranthene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	151(2)	50		
6648180	Benzo(a)pyrene	2013/03/14	NC	60 - 130	110	60 - 130	<0.020	mg/kg	146(2)	50		
6648180	Indeno(1,2,3-cd)pyrene	2013/03/14	NC	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6648180	Dibenz(a,h)anthracene	2013/03/14	92	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6648180	Benzo(g,h,i)perylene	2013/03/14	NC	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6648232	Soluble Chloride (Cl)	2013/03/13					5.7, RDL=5.0	mg/L	3.3	30		
6648234	Soluble Sulphate (SO4)	2013/03/13					<10	mg/L	1	30		
6648236	Soluble Chloride (Cl)	2013/03/13					6.2, RDL=5.0	mg/L	2.2	30		
6648237	Soluble Sulphate (SO4)	2013/03/13					<10	mg/L	1.6	30		
6659576	Initial pH of Sample	2013/03/19					4.90, RDL=N/A	pH Units	0.1	20		
6659576	Final pH of Leachate	2013/03/19					4.90, RDL=N/A	pH Units	1.5	20		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6659576	pH of Leaching Fluid	2013/03/19					4.90, RDL=N/A	pH Units	0	20		
6659576	pH after HCl	2013/03/19							2.7	20		
6663792	LEACHATE Lead (Pb)	2013/03/19	93	75 - 125	98	75 - 125	<0.10	mg/L	NC	35		
6663792	LEACHATE Mercury (Hg)	2013/03/19					<0.0020	mg/L				

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665-8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC	Quotation #:	B21275	MAXXAM JOB #: B318225	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#353268-15-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	M. Edwards.		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS!

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	SP13 FU7976	SP13-91-130306	13/03/06		Soil		X	X						X			2	
2	FU7977	SP13-92-130306					X	X						X			2	
3	FU7978	SP13-93-130306					X	X	X	X	X			X			2	
4	FU7979	SP13-94-130306					X	X						X			2	
5	FU7980	SP13-95-130306					X	X						X			2	
6	FU7981	SP13-96-130306					X	X						X			2	
7		SP13-96-130306					X	X						X			2	
8	FU7982	SP13-97-130306					X	X						X			2	
9	FU7983	SP13-98-130306					X	X						X			2	B318225
10	FU7984	SP13-99-130306					X	X	X	X	X			X			2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[illegible]	13/03/06	16:00	[illegible]	2013/03/07	08:00		[ ]	1.2	[X] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B318225	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #: C#553268-16-01	PROJECT MANAGER: Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	M. Edwards.		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FU8368	SP13-100-130306	13/03/06		Soil		X	X						X			2	
2	FU8294	SP13-100-01-130306	13/03/06				X	X						X			2	
3	FU8295	SP13-101-130306	13/03/06				X	X						X			2	
4	FU8296	SP13-102-130306					X	X						X			2	
5	FU8297	SP13-103-130306					X	X						X			2	
6	FU8298	SP13-104-130306					X	X						X			2	
7	FU8299	SP13-105-130306					X	X						X			2	
8	FU8300	SP13-106-130306					X	X						X			2	
9	FU8301	SP13-107-130306					X	X						X			2	
10	FU8302	SP13-108-130306					X	X						X			2	B318225

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[signature] Shawn Batts	13/03/06	16:00	[signature] Laurel Berthier	2013/03/07	08:00		[ ]	12.2	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B318225	BOTTLE ORDER #: 353268
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828	CHAIN OF CUSTODY #: C053258-17-01	PROJECT MANAGER: Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Project Name:			
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC		
				Sampled By:	M. Edwards		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Run Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FU8312	SP13-109-130306	13/03/06		soil		X	X						X			2	
2	FU8370	SP13-110-130706					X	X						X			2	
3	FU8313	SP13-110-a-130306					X	X						X			2	
4	FU8314	SP13-111-130306					X	X						X			2	
5	FU8315	SP13-112-130306					X	X						X			2	
6																		
7																		
8																		
9																		
10																		

B318225

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[illegible]	13/03/06	16:00	[illegible]	2013/03/07	08:00		[ ]	1,2	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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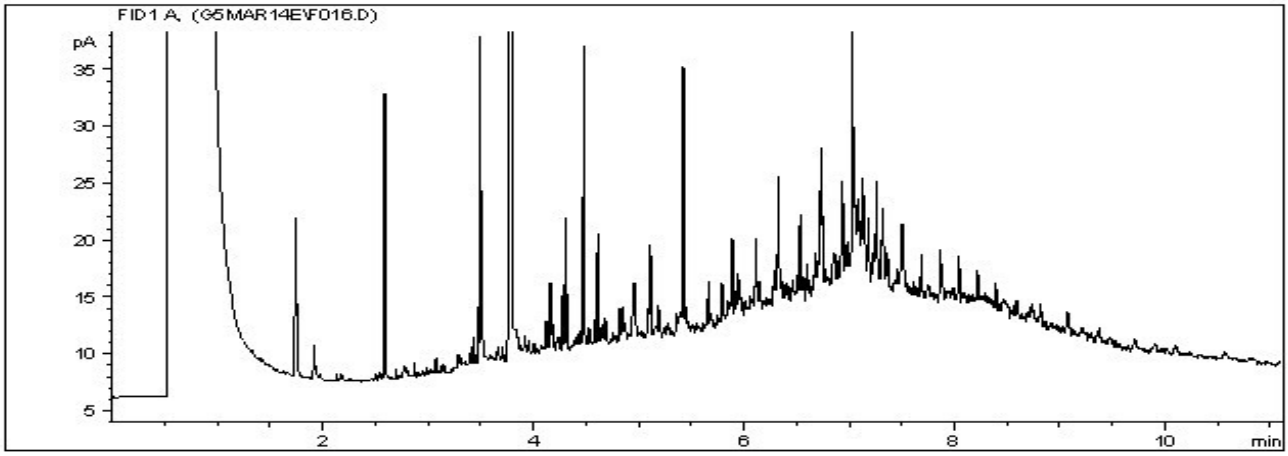
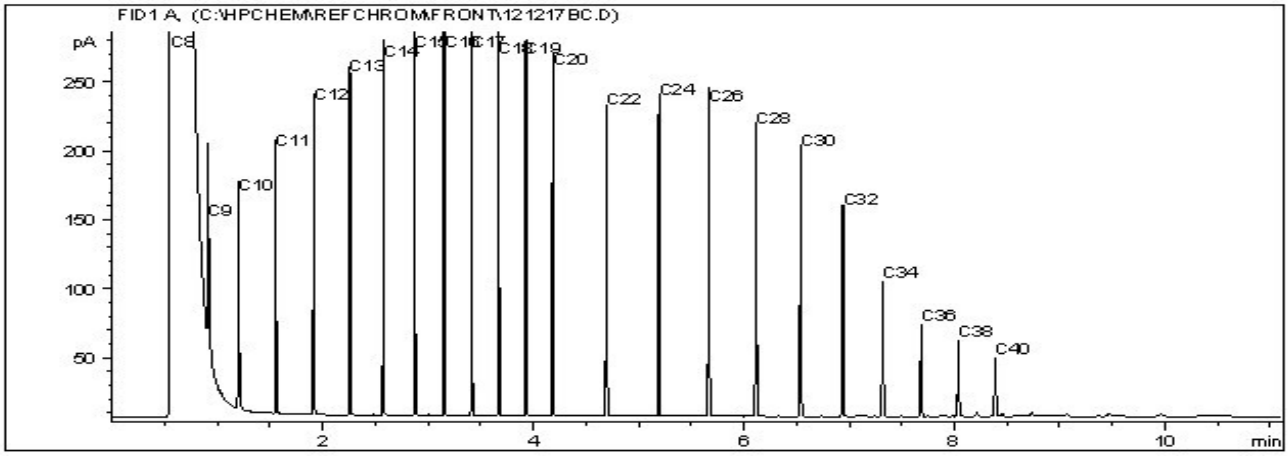
Report Date: 2013/03/20
Maxxam Job #: B318225
Maxxam Sample: FU7978

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-93-130306

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

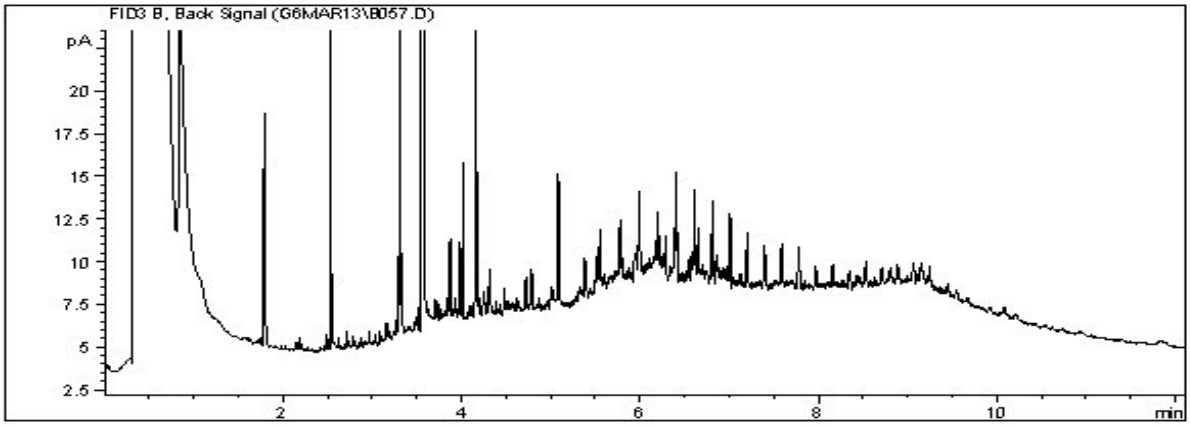
Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

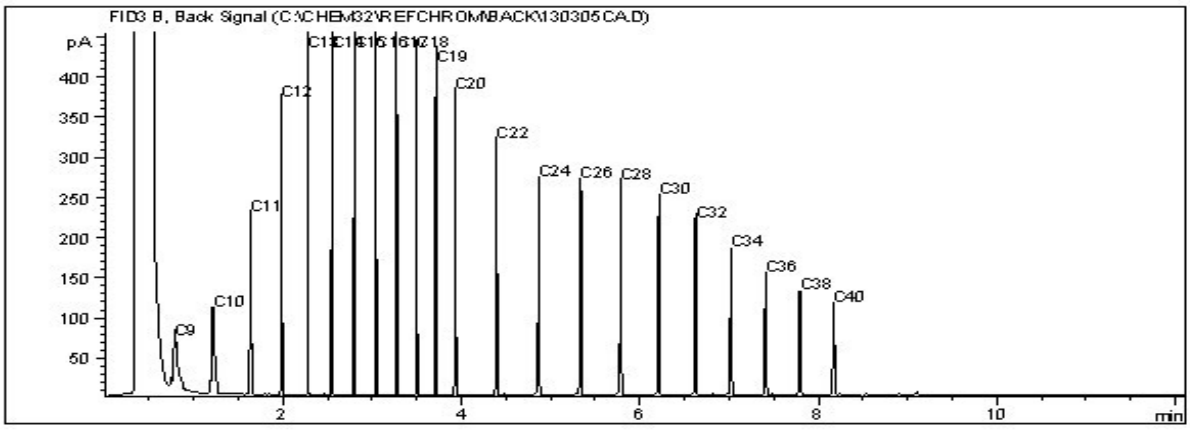
Report Date: 2013/03/20
Maxxam Job #: B318225
Maxxam Sample: FU7978

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-93-130306

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

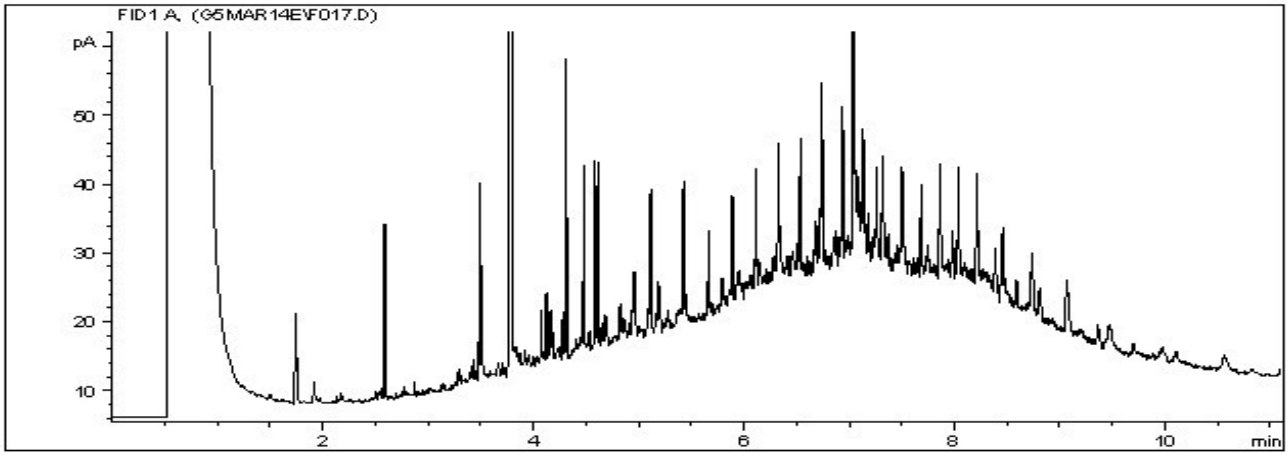
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

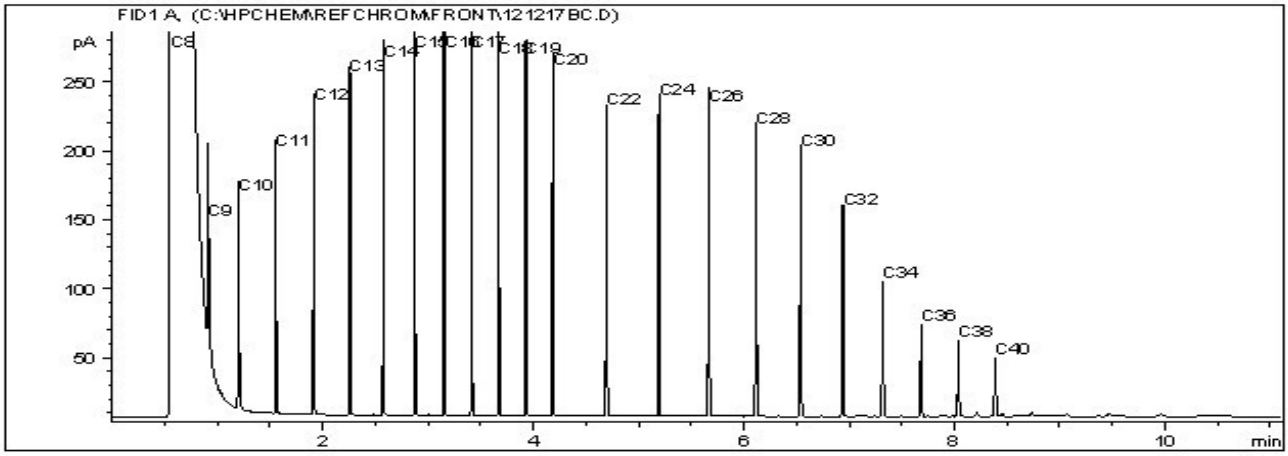
Report Date: 2013/03/20
Maxxam Job #: B318225
Maxxam Sample: FU7984

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-99-130306

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

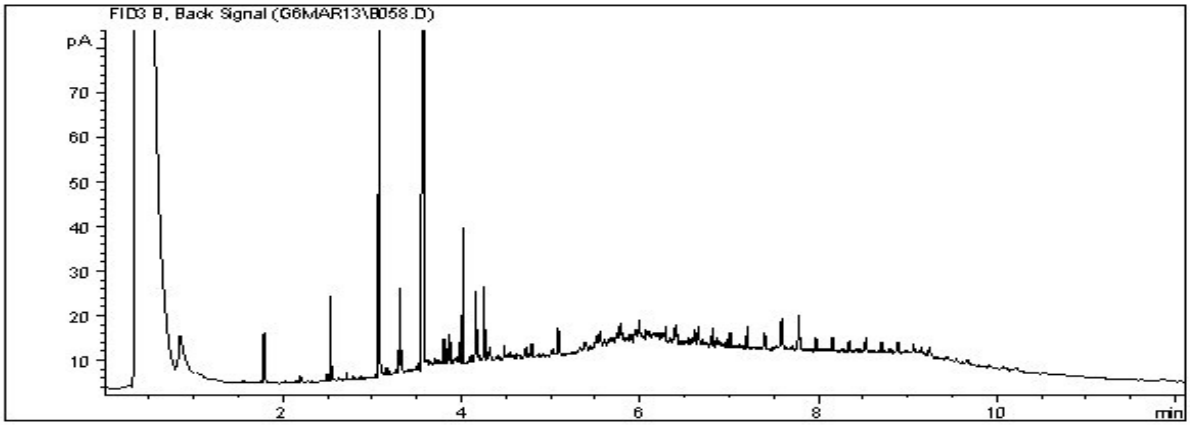
Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

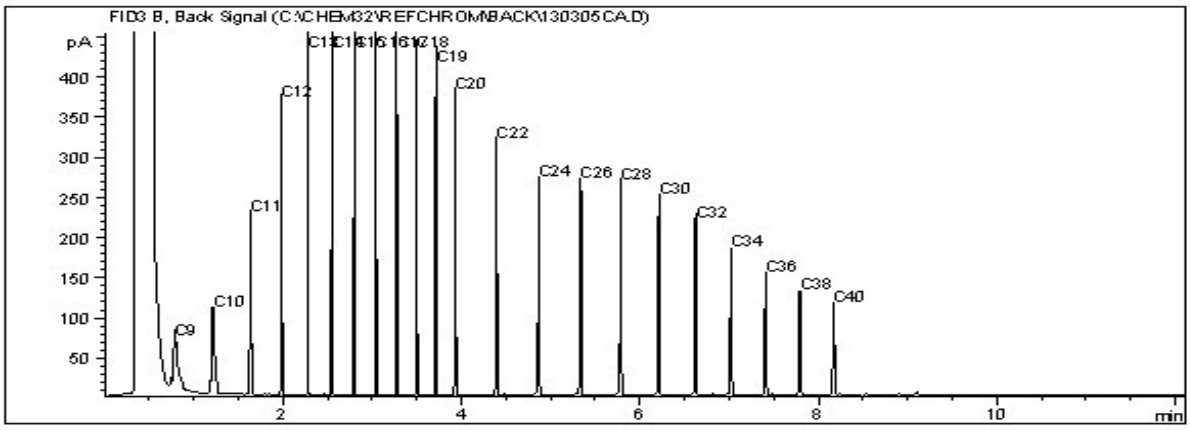
Report Date: 2013/03/20
Maxxam Job #: B318225
Maxxam Sample: FU7984

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-99-130306

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

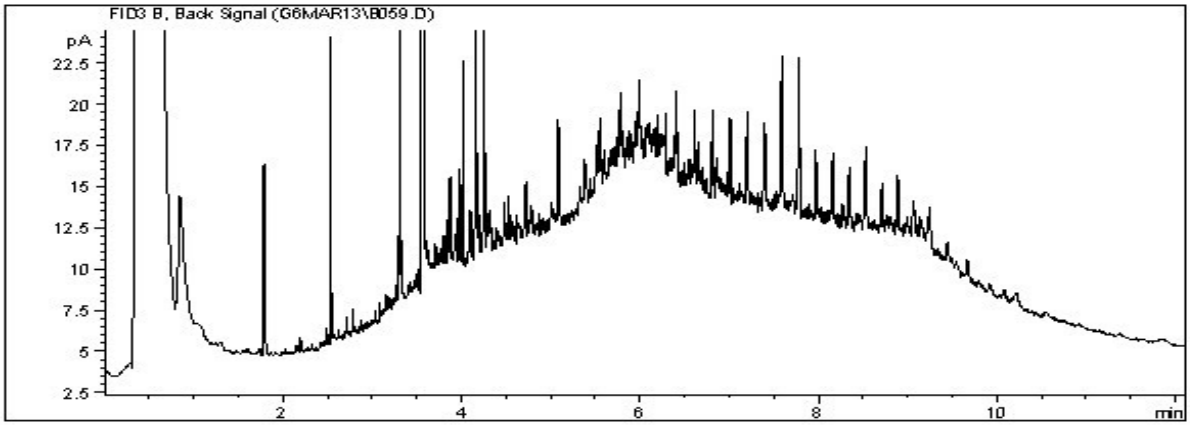
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

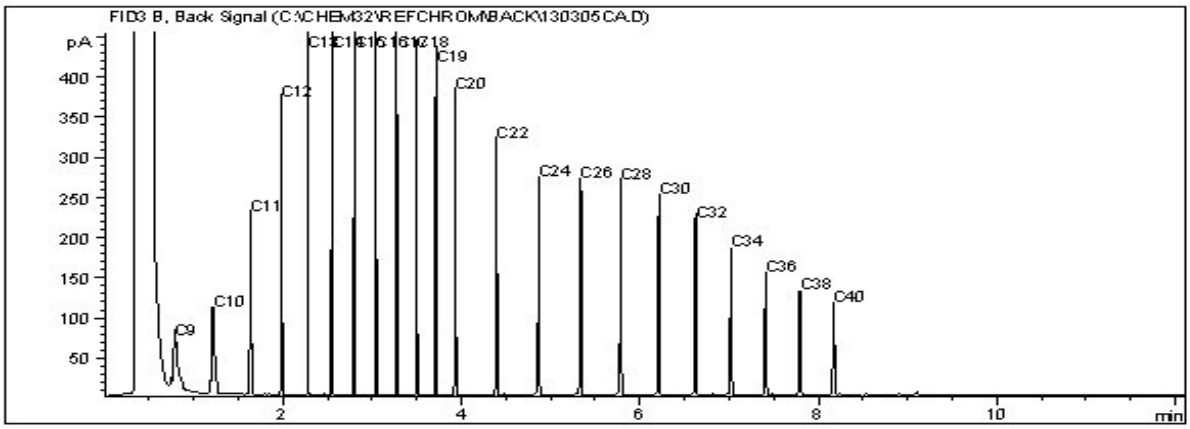
Report Date: 2013/03/20
Maxxam Job #: B318225
Maxxam Sample: FU7984 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-99-130306

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35326820, 35326821

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/21
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B318611
Received: 2013/03/08, 08:00

Sample Matrix: Soil
Samples Received: 18

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/12	2013/03/14	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	18	2013/03/14	2013/03/18	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	18	2013/03/14	2013/03/18	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	1	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	1	2013/03/12	2013/03/15	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	12	2013/03/11	2013/03/12	BBY7SOP-00001	EPA 6020A
Elements by ICPMS (total)	6	2013/03/12	2013/03/13	BBY7SOP-00001	EPA 6020A
Metals - TCLP	1	2013/03/19	2013/03/20	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	1	N/A	2013/03/11	BBY6SOP-00039	Carter SSMA 47.4
Moisture	1	N/A	2013/03/13	BBY8SOP-00017	Ont MOE -E 3139
Moisture	17	N/A	2013/03/14	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	9	2013/03/13	2013/03/14	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	8	2013/03/13	2013/03/15	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/14	2013/03/15	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	18	N/A	2013/03/15	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	18	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	12	2013/03/12	2013/03/12	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	6	2013/03/14	2013/03/14	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	18	2013/03/14	2013/03/15	BBY6SOP-00025	SM-4500H+B
TCLP pH Measurements	1	N/A	2013/03/20	BBY7SOP-00005	EPA 1311
Sodium Adsorption Ratio SP	12	N/A	2013/03/12		
Sodium Adsorption Ratio SP	6	N/A	2013/03/13		
Saturated Paste	18	2013/03/14	2013/03/15	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	18	N/A	2013/03/18		
Sulphate (soluble) (soil)	18	2013/03/14	2013/03/18	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	18	N/A	2013/03/18	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	1	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	1	2013/03/12	2013/03/14	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	1	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FV0919		
Sampling Date		2013/03/07		
	UNITS	**SP13-120-130307**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/kg	12	10	6650740
F3 (C16-C34 Hydrocarbons)	mg/kg	260	10	6650740
F4 (C34-C50 Hydrocarbons)	mg/kg	180	10	6650740
Reached Baseline at C50	mg/kg	NO	N/A	6650740
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	90		6650740

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FV0927		
Sampling Date		2013/03/07		
	UNITS	**SP13-126-130307**	**RDL**	**QC Batch**
Physical Properties				
200 mesh (>.075 mm)	%	65.2	0.10	6638279
200 mesh (<.075 mm)	%	34.9	0.10	6638279

PHYSICAL TESTING (SOIL)

Maxxam ID		FV0912	FV0913	FV0914	FV0915	FV0916	FV0917		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-113-130307**	**SP13-114-130307**	**SP13-115-130307**	**SP13-116-130307**	**SP13-117-130307**	**SP13-118-130307**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	16	19	17	19	15	17	0.30	6643972

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FV0918		FV0919		FV0920	FV0921	FV0923		
Sampling Date		2013/03/07		2013/03/07		2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-119-130307**	**QC Batch**	**SP13-120-130307**	**QC Batch**	**SP13-121-130307**	**SP13-121-01-130307**	**SP13-122-130307**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	16	6643972	17	6635249	14	13	19	0.30	6647950

Maxxam ID		FV0924	FV0925	FV0925	FV0926		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-123-130307**	**SP13-124-130307**	**SP13-124-130307 Lab-Dup**	**SP13-125-130307**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	15	16	17	16	0.30	6647950

Maxxam ID		FV0927	FV0928	FV0929	FV0930		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-126-130307**	**SP13-127-130307**	**SP13-128-130307**	**SP13-129-130307**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	18	17	14	14	0.30	6647950

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		FV0924		
Sampling Date		2013/03/07		
	UNITS	**SP13-123-130307**	**RDL**	**QC Batch**
TCLP Extraction Procedure				
Initial pH of Sample	pH Units	9.52	N/A	6663500
pH after HCl	pH Units	2.20	N/A	6663500
Final pH of Leachate	pH Units	5.34	N/A	6663500
pH of Leaching Fluid	pH Units	4.98	N/A	6663500

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FV0919		
Sampling Date		2013/03/07		
	UNITS	**SP13-120-130307**	**RDL**	**QC Batch**
Calculated Parameters				
LEPH (C10-C19 less PAH)	mg/kg	<100	100	6634961
HEPH (C19-C32 less PAH)	mg/kg	268	100	6634961
Hydrocarbons				
EPH (C10-C19)	mg/kg	<100	100	6651842
EPH (C19-C32)	mg/kg	269	100	6651842
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	100		6651842

RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FV0919		
Sampling Date		2013/03/07		
	UNITS	**SP13-120-130307**	**RDL**	**QC Batch**
Calculated Parameters				
F1 (C6-C10) - BTEX	mg/kg	<10	10	6634956
Volatiles				
VPH (VH6 to 10 - BTEX)	mg/kg	<10	10	6634962
Methyl-tert-butylether (MTBE)	mg/kg	<0.10(1)	0.10	6646887
Benzene	mg/kg	<0.0050(1)	0.0050	6646887
Toluene	mg/kg	<0.020(1)	0.020	6646887
Ethylbenzene	mg/kg	<0.010(1)	0.010	6646887
m & p-Xylene	mg/kg	<0.040(1)	0.040	6646887
o-Xylene	mg/kg	<0.040(1)	0.040	6646887
Styrene	mg/kg	<0.030(1)	0.030	6646887
Xylenes (Total)	mg/kg	<0.040	0.040	6646887
VH C6-C10	mg/kg	<10(1)	10	6646887
(C6-C10)	mg/kg	<10(1)	10	6646887
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	96		6646887
4-BROMOFLUOROBENZENE (sur.)	%	100		6646887
D10-ETHYLBENZENE (sur.)	%	109		6646887
D4-1,2-DICHLOROETHANE (sur.)	%	106		6646887

RDL = Reportable Detection Limit
(1) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime

Maxxam

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV0912	FV0913	FV0914	FV0915	FV0916	FV0917		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-113-130307**	**SP13-114-130307**	**SP13-115-130307**	**SP13-116-130307**	**SP13-117-130307**	**SP13-118-130307**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.86	7.86	7.61	7.73	7.83	7.77	0.010	6636542
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21000	20700	23600	22000	20000	22100	100	6636535
Total Antimony (Sb)	mg/kg	37.8	42.4	27.1	32.9	56.4	36.8	0.10	6636535
Total Arsenic (As)	mg/kg	73.9	84.0	54.2	58.7	110	74.5	0.50	6636535
Total Barium (Ba)	mg/kg	113	106	114	107	108	113	0.10	6636535
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.43	<0.40	0.43	<0.40	0.40	6636535
Total Bismuth (Bi)	mg/kg	0.25	0.24	0.21	0.21	0.37	0.28	0.10	6636535
Total Cadmium (Cd)	mg/kg	0.634	0.478	0.536	0.540	0.631	0.603	0.050	6636535
Total Calcium (Ca)	mg/kg	9010	8250	9690	9400	10900	9980	100	6636535
Total Chromium (Cr)	mg/kg	56.7	46.5	44.5	43.4	44.4	44.5	1.0	6636535
Total Cobalt (Co)	mg/kg	15.3	14.1	14.4	14.7	15.8	14.9	0.30	6636535
Total Copper (Cu)	mg/kg	187	164	199	155	174	166	0.50	6636535
Total Iron (Fe)	mg/kg	31600	29300	30600	29900	30200	30400	100	6636535
Total Lead (Pb)	mg/kg	108	99.3	92.5	86.1	125	106	0.10	6636535
Total Lithium (Li)	mg/kg	12.6	12.3	15.3	12.4	12.4	12.9	5.0	6636535
Total Magnesium (Mg)	mg/kg	7750	6990	7530	7580	7530	7880	100	6636535
Total Manganese (Mn)	mg/kg	532	514	542	533	516	525	0.20	6636535
Total Mercury (Hg)	mg/kg	0.384	0.358	0.332	0.328	0.295	0.245	0.050	6636535
Total Molybdenum (Mo)	mg/kg	5.47	4.72	5.01	4.23	5.84	4.21	0.10	6636535
Total Nickel (Ni)	mg/kg	35.0	30.9	34.1	31.7	57.3	31.7	0.80	6636535
Total Phosphorus (P)	mg/kg	703	593	591	706	695	686	10	6636535
Total Potassium (K)	mg/kg	772	724	740	746	734	804	100	6636535
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6636535
Total Silver (Ag)	mg/kg	0.175	0.165	0.371	0.144	0.198	2.09	0.050	6636535
Total Sodium (Na)	mg/kg	348	297	285	295	332	312	100	6636535
Total Strontium (Sr)	mg/kg	62.3	51.0	63.2	56.5	59.5	57.1	0.10	6636535
Total Thallium (Tl)	mg/kg	0.085	0.090	0.080	0.085	0.102	0.094	0.050	6636535
Total Tin (Sn)	mg/kg	7.66	8.48	6.33	7.48	13.9	6.85	0.10	6636535
Total Titanium (Ti)	mg/kg	1020	952	1040	1100	910	962	1.0	6636535
Total Uranium (U)	mg/kg	0.878	0.827	2.05	0.826	0.869	1.04	0.050	6636535
Total Vanadium (V)	mg/kg	73.2	68.7	77.3	74.6	69.9	74.2	2.0	6636535
Total Zinc (Zn)	mg/kg	522	485	457	430	609	514	1.0	6636535
Total Zirconium (Zr)	mg/kg	3.23	3.26	3.58	3.36	3.04	3.14	0.50	6636535

RDL = Reportable Detection Limit

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV0918	FV0919	FV0920	FV0921	FV0923	FV0924		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-119-130307**	**SP13-120-130307**	**SP13-121-130307**	**SP13-121-01-130307**	**SP13-122-130307**	**SP13-123-130307**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.64	7.80	7.80	7.77	7.74	7.98	0.010	6636542
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	23000	22000	22300	22000	21400	19900	100	6636535
Total Antimony (Sb)	mg/kg	26.0	41.3	32.8	40.4	28.4	68.6	0.10	6636535
Total Arsenic (As)	mg/kg	55.6	71.6	68.9	80.4	53.5	145	0.50	6636535
Total Barium (Ba)	mg/kg	111	105	109	107	93.8	111	0.10	6636535
Total Beryllium (Be)	mg/kg	0.42	<0.40	<0.40	0.46	<0.40	<0.40	0.40	6636535
Total Bismuth (Bi)	mg/kg	0.21	0.22	0.23	0.24	0.17	0.33	0.10	6636535
Total Cadmium (Cd)	mg/kg	0.538	0.486	0.519	0.534	0.455	0.765	0.050	6636535
Total Calcium (Ca)	mg/kg	9770	11800	11100	9520	9070	9540	100	6636535
Total Chromium (Cr)	mg/kg	42.0	52.4	47.8	46.6	38.0	55.5	1.0	6636535
Total Cobalt (Co)	mg/kg	13.9	14.7	14.5	14.8	13.5	17.0	0.30	6636535
Total Copper (Cu)	mg/kg	135	170	162	184	122	234	0.50	6636535
Total Iron (Fe)	mg/kg	31300	30100	29800	30000	28300	31400	100	6636535
Total Lead (Pb)	mg/kg	79.9	96.2	93.5	97.9	74.4	168	0.10	6636535
Total Lithium (Li)	mg/kg	13.0	12.7	12.8	12.2	12.7	12.1	5.0	6636535
Total Magnesium (Mg)	mg/kg	7410	8060	7950	7960	7310	7560	100	6636535
Total Manganese (Mn)	mg/kg	574	537	522	543	508	474	0.20	6636535
Total Mercury (Hg)	mg/kg	0.240	0.408	0.282	0.280	0.236	0.752	0.050	6636535
Total Molybdenum (Mo)	mg/kg	3.24	4.48	4.59	4.29	3.23	7.99	0.10	6636535
Total Nickel (Ni)	mg/kg	32.9	34.0	43.9	49.5	33.6	36.1	0.80	6636535
Total Phosphorus (P)	mg/kg	696	661	635	611	666	657	10	6636535
Total Potassium (K)	mg/kg	755	742	780	722	695	806	100	6636535
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6636535
Total Silver (Ag)	mg/kg	0.153	0.175	0.169	0.175	0.122	0.241	0.050	6636535
Total Sodium (Na)	mg/kg	264	341	314	317	280	428	100	6636535
Total Strontium (Sr)	mg/kg	55.8	72.0	57.6	54.6	54.2	57.4	0.10	6636535
Total Thallium (Tl)	mg/kg	0.083	0.087	0.089	0.091	0.075	0.124	0.050	6636535
Total Tin (Sn)	mg/kg	4.99	7.91	6.62	7.27	5.00	11.4	0.10	6636535
Total Titanium (Ti)	mg/kg	1100	1090	1030	1090	1020	898	1.0	6636535
Total Uranium (U)	mg/kg	0.794	0.889	1.04	0.922	0.801	1.28	0.050	6636535
Total Vanadium (V)	mg/kg	74.6	74.5	72.6	72.5	70.0	67.4	2.0	6636535
Total Zinc (Zn)	mg/kg	377	454	453	535	343	838	1.0	6636535
Total Zirconium (Zr)	mg/kg	3.50	3.30	3.52	3.98	3.30	3.55	0.50	6636535

RDL = Reportable Detection Limit

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV0925	FV0926	FV0927	FV0928	FV0929	FV0930		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-124-130307**	**SP13-125-130307**	**SP13-126-130307**	**SP13-127-130307**	**SP13-128-130307**	**SP13-129-130307**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.68	7.55	7.50	7.64	7.93	7.78	0.010	6641146
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18900	22800	19200	20700	17400	20400	100	6641071
Total Antimony (Sb)	mg/kg	34.6	24.2	26.5	48.1	56.8	42.9	0.10	6641071
Total Arsenic (As)	mg/kg	70.8	50.7	61.6	95.4	103	82.7	0.50	6641071
Total Barium (Ba)	mg/kg	90.4	94.4	94.8	96.0	82.0	100	0.10	6641071
Total Beryllium (Be)	mg/kg	<0.40	0.44	<0.40	<0.40	<0.40	0.43	0.40	6641071
Total Bismuth (Bi)	mg/kg	0.25	0.18	0.24	0.33	0.28	0.26	0.10	6641071
Total Cadmium (Cd)	mg/kg	0.427	0.422	0.468	0.552	0.472	0.558	0.050	6641071
Total Calcium (Ca)	mg/kg	13200	7860	7630	8880	11700	10500	100	6641071
Total Chromium (Cr)	mg/kg	47.7	41.8	40.6	49.0	42.8	43.8	1.0	6641071
Total Cobalt (Co)	mg/kg	14.0	13.0	12.9	14.7	15.0	14.9	0.30	6641071
Total Copper (Cu)	mg/kg	126	110	130	166	132	152	0.50	6641071
Total Iron (Fe)	mg/kg	27800	28800	27500	30000	27000	29100	100	6641071
Total Lead (Pb)	mg/kg	110	62.1	67.1	114	110	98.6	0.10	6641071
Total Lithium (Li)	mg/kg	11.4	12.7	11.4	15.9	10.6	12.2	5.0	6641071
Total Magnesium (Mg)	mg/kg	6850	6760	6420	6920	7720	6820	100	6641071
Total Manganese (Mn)	mg/kg	494	459	477	400	476	490	0.20	6641071
Total Mercury (Hg)	mg/kg	0.268	0.193	0.190	0.197	0.176	0.272	0.050	6641071
Total Molybdenum (Mo)	mg/kg	4.14	3.52	7.18	6.76	4.49	6.95	0.10	6641071
Total Nickel (Ni)	mg/kg	29.1	28.4	27.7	31.2	28.7	29.5	0.80	6641071
Total Phosphorus (P)	mg/kg	541	446	544	518	551	586	10	6641071
Total Potassium (K)	mg/kg	634	678	627	690	579	656	100	6641071
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6641071
Total Silver (Ag)	mg/kg	0.133	0.125	0.142	0.232	0.183	0.192	0.050	6641071
Total Sodium (Na)	mg/kg	305	209	238	354	331	307	100	6641071
Total Strontium (Sr)	mg/kg	89.3	42.5	43.1	52.1	56.2	59.0	0.10	6641071
Total Thallium (Tl)	mg/kg	0.080	0.079	0.066	0.101	0.092	0.085	0.050	6641071
Total Tin (Sn)	mg/kg	7.91	4.82	7.46	8.78	8.78	7.91	0.10	6641071
Total Titanium (Ti)	mg/kg	873	990	778	830	877	916	1.0	6641071
Total Uranium (U)	mg/kg	0.849	0.849	0.969	1.42	0.958	1.34	0.050	6641071
Total Vanadium (V)	mg/kg	63.9	72.4	64.7	68.5	61.9	69.3	2.0	6641071
Total Zinc (Zn)	mg/kg	407	344	389	595	486	512	1.0	6641071
Total Zirconium (Zr)	mg/kg	3.01	3.99	2.92	2.93	2.61	2.77	0.50	6641071

RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

TCLP METALS (SOIL)

Maxxam ID		FV0924		
Sampling Date		2013/03/07		
	UNITS	**SP13-123-130307**	**RDL**	**QC Batch**
Metals				
LEACHATE Arsenic (As)	mg/L	<0.10	0.10	6668255

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0912	FV0913	FV0914	FV0915	FV0916	FV0917		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-113-130307**	**SP13-114-130307**	**SP13-115-130307**	**SP13-116-130307**	**SP13-117-130307**	**SP13-118-130307**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	8.2	1.8	5.7	3.6	6.0	3.0	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.66	0.16	0.48	0.30	0.49	0.25	0.10	6634957
Polycyclic Aromatics									
Naphthalene	mg/kg	0.049	0.021	0.34	0.057	0.096	0.041	0.010	6649596
2-Methylnaphthalene	mg/kg	0.057	0.022	0.29	0.039	0.088	0.035	0.020	6649596
Acenaphthylene	mg/kg	0.075	0.022	0.037	0.030	0.029	0.027	0.0050	6649596
Acenaphthene	mg/kg	0.032	0.012	0.20	0.040	0.11	0.032	0.0050	6649596
Fluorene	mg/kg	0.043	<0.020	0.29	0.042	0.095	0.032	0.020	6649596
Phenanthrene	mg/kg	0.88	0.11	1.1	0.28	0.70	0.22	0.020	6649596
Anthracene	mg/kg	0.22	0.039	0.41	0.077	0.19	0.062	0.0040	6649596
Fluoranthene	mg/kg	1.3	0.19	0.78	0.45	0.92	0.35	0.020	6649596
Pyrene	mg/kg	1.1	0.19	0.89	0.44	0.79	0.35	0.020	6649596
Benzo(a)anthracene	mg/kg	0.48	0.081	0.37	0.17	0.26	0.13	0.020	6649596
Chrysene	mg/kg	0.55	0.10	0.44	0.20	0.35	0.16	0.020	6649596
Benzo(b&j)fluoranthene	mg/kg	0.60	0.13	0.40	0.27	0.45	0.23	0.020	6649596
Benzo(k)fluoranthene	mg/kg	0.19	0.051	0.13	0.089	0.18	0.073	0.020	6649596
Benzo(a)pyrene	mg/kg	0.43	0.10	0.34	0.21	0.35	0.17	0.020	6649596
Indeno(1,2,3-cd)pyrene	mg/kg	0.25	0.070	0.18	0.14	0.22	0.11	0.050	6649596
Dibenz(a,h)anthracene	mg/kg	0.067	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6649596
Benzo(g,h,i)perylene	mg/kg	0.25	0.077	0.19	0.15	0.25	0.12	0.050	6649596
Low Molecular Weight PAH`s	mg/kg	1.3	0.23	2.7	0.57	1.3	0.45	0.050	6634958
High Molecular Weight PAH`s	mg/kg	5.6	1.1	4.0	2.3	4.1	1.8	0.050	6634958
Total PAH	mg/kg	7.0	1.3	6.7	2.9	5.4	2.3	0.050	6634958
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	94	99	98	91	92	99		6649596
D8-ACENAPHTHYLENE (sur.)	%	87	91	89	85	85	88		6649596
D8-NAPHTHALENE (sur.)	%	88	92	89	86	86	90		6649596
TERPHENYL-D14 (sur.)	%	95	102	100	94	93	101		6649596

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0918	FV0919	FV0920	FV0921	FV0923		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-119-130307**	**SP13-120-130307**	**SP13-121-130307**	**SP13-121-01-130307**	**SP13-122-130307**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	1.5	3.2	4.9	3.0	4.4	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.14	0.26	0.41	0.26	0.36	0.10	6634957
Polycyclic Aromatics								
Naphthalene	mg/kg	0.023	0.052	0.025	0.024	0.024	0.010	6649596
2-Methylnaphthalene	mg/kg	0.021	0.057	0.033	0.032	0.025	0.020	6649596
Acenaphthylene	mg/kg	0.015	0.032	0.045	0.031	0.035	0.0050	6649596
Acenaphthene	mg/kg	0.015	0.029	0.030	0.027	0.035	0.0050	6649596
Fluorene	mg/kg	<0.020	0.033	0.037	0.039	0.045	0.020	6649596
Phenanthrene	mg/kg	0.12	0.19	0.27	0.24	0.29	0.020	6649596
Anthracene	mg/kg	0.030	0.065	0.12	0.074	0.11	0.0040	6649596
Fluoranthene	mg/kg	0.18	0.36	0.67	0.36	0.58	0.020	6649596
Pyrene	mg/kg	0.18	0.36	0.69	0.38	0.59	0.020	6649596
Benzo(a)anthracene	mg/kg	0.065	0.14	0.28	0.14	0.25	0.020	6649596
Chrysene	mg/kg	0.087	0.17	0.31	0.17	0.26	0.020	6649596
Benzo(b&j)fluoranthene	mg/kg	0.11	0.24	0.33	0.22	0.32	0.020	6649596
Benzo(k)fluoranthene	mg/kg	0.041	0.086	0.14	0.074	0.10	0.020	6649596
Benzo(a)pyrene	mg/kg	0.082	0.17	0.29	0.18	0.25	0.020	6649596
Indeno(1,2,3-cd)pyrene	mg/kg	0.054	0.11	0.17	0.11	0.14	0.050	6649596
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6649596
Benzo(g,h,i)perylene	mg/kg	0.059	0.12	0.17	0.12	0.15	0.050	6649596
Low Molecular Weight PAH`s	mg/kg	0.22	0.46	0.56	0.46	0.57	0.050	6634958
High Molecular Weight PAH`s	mg/kg	0.92	1.9	3.2	1.9	2.9	0.050	6634958
Total PAH	mg/kg	1.1	2.4	3.8	2.3	3.4	0.050	6634958
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	101	98	110	99	97		6649596
D8-ACENAPHTHYLENE (sur.)	%	90	89	99	91	89		6649596
D8-NAPHTHALENE (sur.)	%	89	90	99	91	90		6649596
TERPHENYL-D14 (sur.)	%	103	100	111	101	98		6649596

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0924	FV0925		FV0926		
Sampling Date		2013/03/07	2013/03/07		2013/03/07		
	UNITS	**SP13-123-130307**	**SP13-124-130307**	**QC Batch**	**SP13-125-130307**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	4.2	4.3	6634957	1.3	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.35	0.36	6634957	0.11	0.10	6634957
Polycyclic Aromatics							
Naphthalene	mg/kg	0.051	0.074	6649596	0.030	0.010	6649606
2-Methylnaphthalene	mg/kg	0.055	0.043	6649596	<0.020	0.020	6649606
Acenaphthylene	mg/kg	0.050	0.044	6649596	0.012	0.0050	6649606
Acenaphthene	mg/kg	0.068	0.057	6649596	0.022	0.0050	6649606
Fluorene	mg/kg	0.091	0.070	6649596	0.024	0.020	6649606
Phenanthrene	mg/kg	0.39	0.35	6649596	0.11	0.020	6649606
Anthracene	mg/kg	0.12	0.083	6649596	0.024	0.0040	6649606
Fluoranthene	mg/kg	0.53	0.51	6649596	0.15	0.020	6649606
Pyrene	mg/kg	0.53	0.49	6649596	0.13	0.020	6649606
Benzo(a)anthracene	mg/kg	0.20	0.20	6649596	0.055	0.020	6649606
Chrysene	mg/kg	0.24	0.24	6649596	0.075	0.020	6649606
Benzo(b&j)fluoranthene	mg/kg	0.31	0.33	6649596	0.090	0.020	6649606
Benzo(k)fluoranthene	mg/kg	0.10	0.11	6649596	0.031	0.020	6649606
Benzo(a)pyrene	mg/kg	0.25	0.25	6649596	0.068	0.020	6649606
Indeno(1,2,3-cd)pyrene	mg/kg	0.17	0.16	6649596	<0.050	0.050	6649606
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	6649596	<0.050	0.050	6649606
Benzo(g,h,i)perylene	mg/kg	0.19	0.17	6649596	0.050	0.050	6649606
Low Molecular Weight PAH`s	mg/kg	0.82	0.72	6634958	0.22	0.050	6634958
High Molecular Weight PAH`s	mg/kg	2.7	2.7	6634958	0.70	0.050	6634958
Total PAH	mg/kg	3.5	3.4	6634958	0.92	0.050	6634958
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	99	103	6649596	94		6649606
D8-ACENAPHTHYLENE (sur.)	%	91	94	6649596	90		6649606
D8-NAPHTHALENE (sur.)	%	91	94	6649596	93		6649606
TERPHENYL-D14 (sur.)	%	101	105	6649596	95		6649606

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV0927	FV0928	FV0929	FV0930		
Sampling Date		2013/03/07	2013/03/07	2013/03/07	2013/03/07		
	UNITS	**SP13-126-130307**	**SP13-127-130307**	**SP13-128-130307**	**SP13-129-130307**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	2.2	2.3	2.9	3.3	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.18	0.19	0.25	0.29	0.10	6634957
Polycyclic Aromatics							
Naphthalene	mg/kg	0.041	0.034	0.035	0.029	0.010	6649606
2-Methylnaphthalene	mg/kg	<0.020	0.033	0.022	0.033	0.020	6649606
Acenaphthylene	mg/kg	0.024	0.025	0.030	0.050	0.0050	6649606
Acenaphthene	mg/kg	0.016	0.028	0.027	0.026	0.0050	6649606
Fluorene	mg/kg	<0.020	0.029	0.028	0.030	0.020	6649606
Phenanthrene	mg/kg	0.12	0.17	0.20	0.19	0.020	6649606
Anthracene	mg/kg	0.033	0.041	0.048	0.050	0.0040	6649606
Fluoranthene	mg/kg	0.21	0.25	0.31	0.27	0.020	6649606
Pyrene	mg/kg	0.22	0.26	0.29	0.37	0.020	6649606
Benzo(a)anthracene	mg/kg	0.10	0.11	0.14	0.14	0.020	6649606
Chrysene	mg/kg	0.12	0.15	0.18	0.19	0.020	6649606
Benzo(b&j)fluoranthene	mg/kg	0.16	0.17	0.21	0.24	0.020	6649606
Benzo(k)fluoranthene	mg/kg	0.055	0.059	0.077	0.082	0.020	6649606
Benzo(a)pyrene	mg/kg	0.12	0.12	0.17	0.20	0.020	6649606
Indeno(1,2,3-cd)pyrene	mg/kg	0.074	0.085	0.10	0.12	0.050	6649606
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6649606
Benzo(g,h,i)perylene	mg/kg	0.082	0.10	0.12	0.14	0.050	6649606
Low Molecular Weight PAH`s	mg/kg	0.23	0.36	0.39	0.40	0.050	6634958
High Molecular Weight PAH`s	mg/kg	1.2	1.4	1.7	1.9	0.050	6634958
Total PAH	mg/kg	1.5	1.8	2.1	2.3	0.050	6634958
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	91	90	93	92		6649606
D8-ACENAPHTHYLENE (sur.)	%	88	86	89	89		6649606
D8-NAPHTHALENE (sur.)	%	90	88	91	91		6649606
TERPHENYL-D14 (sur.)	%	93	92	95	93		6649606

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV0912		FV0913		FV0914		FV0915		FV0916		
Sampling Date		2013/03/07		2013/03/07		2013/03/07		2013/03/07		2013/03/07		
	UNITS	**SP13-113-130307**	**RDL**	**SP13-114-130307**	**RDL**	**SP13-115-130307**	**RDL**	**SP13-116-130307**	**RDL**	**SP13-117-130307**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	93	10	80	10	102	10	101	10	143	10	6656229
Soluble Chloride (Cl)	mg/L	56.7	5.0	29.8	5.0	184	5.0	44.9	5.0	49.3	5.0	6656226
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	23.1	2.0	12.4	2.1	73.1	2.0	20.6	2.3	17.8	1.8	6634960
Soluble Sodium (Na)	mg/kg	11.4	2.0	8.0	2.1	22.2	2.0	11.9	2.3	12.3	1.8	6634960
Soluble Parameters												
Soluble Conductivity	uS/cm	495	1.0	381	1.0	871	1.0	499	1.0	669	1.0	6651829
Soluble pH	pH Units	7.16	N/A	7.01	N/A	7.01	N/A	7.21	N/A	7.24	N/A	6651828
Wet Soluble Calcium (Ca)	mg/L	64.6	5.0	55.4	5.0	109	5.0	73.7	5.0	98.2	5.0	6653868
Saturation %	%	40.8	1.0	41.7	1.0	39.7	1.0	46.0	1.0	36.0	1.0	6651827
Wet Soluble Magnesium (Mg)	mg/L	16.1	5.0	12.4	5.0	17.7	5.0	16.6	5.0	20.6	5.0	6653868
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6653868
Wet Soluble Sodium (Na)	mg/L	27.8	5.0	19.1	5.0	55.8	5.0	25.8	5.0	34.2	5.0	6653868
Wet Soluble Sulphur (S)	mg/L	31	30	<30	30	36	30	34	30	56	30	6653868
Sodium Adsorption Ratio	N/A	0.80	0.10	0.60	0.10	1.31	0.10	0.71	0.10	0.82	0.10	6634959

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV0917			FV0918		FV0919		FV0920		
Sampling Date		2013/03/07			2013/03/07		2013/03/07		2013/03/07		
	UNITS	**SP13-118-130307**	**RDL**	**QC Batch**	**SP13-119-130307**	**RDL**	**SP13-120-130307**	**RDL**	**SP13-121-130307**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	113	10	6656229	67	10	103	10	74	10	6656235
Soluble Chloride (Cl)	mg/L	56.5	5.0	6656226	26.8	5.0	33.1	5.0	31.5	5.0	6656232
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	23.1	2.0	6634960	12.1	2.3	14.9	2.2	12.7	2.0	6634960
Soluble Sodium (Na)	mg/kg	12.7	2.0	6634960	9.4	2.3	11.3	2.2	8.7	2.0	6634960
Soluble Parameters											
Soluble Conductivity	uS/cm	558	1.0	6651829	366	1.0	409	1.0	321	1.0	6651832
Soluble pH	pH Units	7.14	N/A	6651828	7.04	N/A	7.30	N/A	7.20	N/A	6651831
Wet Soluble Calcium (Ca)	mg/L	73.7	5.0	6653868	48.4	5.0	56.5	5.0	43.0	5.0	6653927
Saturation %	%	41.0	1.0	6651827	45.1	1.0	44.9	1.0	40.3	1.0	6651830
Wet Soluble Magnesium (Mg)	mg/L	16.4	5.0	6653868	11.2	5.0	16.6	5.0	13.4	5.0	6653927
Wet Soluble Potassium (K)	mg/L	<20	20	6653868	<20	20	<20	20	<20	20	6653927
Wet Soluble Sodium (Na)	mg/L	31.1	5.0	6653868	20.8	5.0	25.2	5.0	21.6	5.0	6653927
Wet Soluble Sulphur (S)	mg/L	36	30	6653868	<30	30	31	30	<30	30	6653927
Sodium Adsorption Ratio	N/A	0.85	0.10	6634959	0.70	0.10	0.76	0.10	0.74	0.10	6634959

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV0921	FV0923		FV0924		FV0925	FV0925		
Sampling Date		2013/03/07	2013/03/07		2013/03/07		2013/03/07	2013/03/07		
	UNITS	**SP13-121-01-130307**	**SP13-122-130307**	**RDL**	**SP13-123-130307**	**RDL**	**SP13-124-130307**	**SP13-124-130307 Lab-Dup**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	94	98	10	114	10	98	99	10	6656235
Soluble Chloride (Cl)	mg/L	42.9	32.8	5.0	28.7	5.0	35.1	35.5	5.0	6656232
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	17.7	13.5	2.1	11.0	1.9	15.5		2.2	6634960
Soluble Sodium (Na)	mg/kg	11.5	9.5	2.1	9.3	1.9	11.9		2.2	6634960
Soluble Parameters										
Soluble Conductivity	uS/cm	478	399	1.0	378	1.0	431	441	1.0	6651832
Soluble pH	pH Units	7.39	7.16	N/A	7.34	N/A	7.16	7.20	N/A	6651831
Wet Soluble Calcium (Ca)	mg/L	66.1	55.1	5.0	46.9	5.0	57.5	59.7	5.0	6653927
Saturation %	%	41.2	41.2	1.0	38.2	1.0	44.3	44.1	1.0	6651830
Wet Soluble Magnesium (Mg)	mg/L	15.4	14.2	5.0	15.8	5.0	16.8	17.0	5.0	6653927
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	20	<20	<20	20	6653927
Wet Soluble Sodium (Na)	mg/L	27.8	23.0	5.0	24.4	5.0	26.8	26.7	5.0	6653927
Wet Soluble Sulphur (S)	mg/L	31	<30	30	35	30	32	33	30	6653927
Sodium Adsorption Ratio	N/A	0.80	0.71	0.10	0.79	0.10	0.80		0.10	6634959

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV0926		FV0927	FV0928	FV0929		FV0930		
Sampling Date		2013/03/07		2013/03/07	2013/03/07	2013/03/07		2013/03/07		
	UNITS	**SP13-125-130307**	**RDL**	**SP13-126-130307**	**SP13-127-130307**	**SP13-128-130307**	**RDL**	**SP13-129-130307**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	84	10	82	121	123	10	113	10	6656235
Soluble Chloride (Cl)	mg/L	39.1	5.0	60.8	224	46.3	5.0	83.4	5.0	6656232
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	15.2	1.9	24.2	91.3	18.4	2.0	31.6	1.9	6634960
Soluble Sodium (Na)	mg/kg	9.4	1.9	10.9	30.4	12.2	2.0	15.2	1.9	6634960
Soluble Parameters										
Soluble Conductivity	uS/cm	445	1.0	478	1050	515	1.0	616	1.0	6651832
Soluble pH	pH Units	7.02	N/A	6.90	7.06	7.35	N/A	7.24	N/A	6651831
Wet Soluble Calcium (Ca)	mg/L	61.1	5.0	58.7	128	70.1	5.0	78.2	5.0	6653927
Saturation %	%	38.9	1.0	39.8	40.7	39.8	1.0	37.9	1.0	6651830
Wet Soluble Magnesium (Mg)	mg/L	14.0	5.0	16.9	22.7	15.7	5.0	17.6	5.0	6653927
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	<20	20	<20	20	6653927
Wet Soluble Sodium (Na)	mg/L	24.3	5.0	27.5	74.8	30.6	5.0	40.1	5.0	6653927
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	47	45	30	41	30	6653927
Sodium Adsorption Ratio	N/A	0.73	0.10	0.81	1.60	0.86	0.10	1.07	0.10	6634959

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Package 1	6.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - TCLP arsenic analysis has been completed as per clients' emailed request. KD4 - March 21/13

Maxxam

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6635249	Moisture	2013/03/13					<0.30	%	0.8	20		
6636535	Total Antimony (Sb)	2013/03/12	101	75 - 125	99	75 - 125	<0.10	mg/kg			94	70 - 130
6636535	Total Arsenic (As)	2013/03/12	111	75 - 125	97	75 - 125	<0.50	mg/kg			98	70 - 130
6636535	Total Barium (Ba)	2013/03/12	NC	75 - 125	101	75 - 125	<0.10	mg/kg			103	70 - 130
6636535	Total Beryllium (Be)	2013/03/12	108	75 - 125	100	75 - 125	<0.40	mg/kg				
6636535	Total Cadmium (Cd)	2013/03/12	115	75 - 125	102	75 - 125	<0.050	mg/kg			104	70 - 130
6636535	Total Chromium (Cr)	2013/03/12	103	75 - 125	101	75 - 125	<1.0	mg/kg	0.2	30	102	70 - 130
6636535	Total Cobalt (Co)	2013/03/12	103	75 - 125	102	75 - 125	<0.30	mg/kg			95	70 - 130
6636535	Total Copper (Cu)	2013/03/12	106	75 - 125	103	75 - 125	<0.50	mg/kg			87	70 - 130
6636535	Total Lead (Pb)	2013/03/12	109	75 - 125	107	75 - 125	<0.10	mg/kg			99	70 - 130
6636535	Total Lithium (Li)	2013/03/12	103	75 - 125	101	75 - 125	<5.0	mg/kg				
6636535	Total Manganese (Mn)	2013/03/12	NC	75 - 125	104	75 - 125	<0.20	mg/kg			103	70 - 130
6636535	Total Mercury (Hg)	2013/03/12	115	75 - 125	98	75 - 125	<0.050	mg/kg			88	70 - 130
6636535	Total Molybdenum (Mo)	2013/03/12	107	75 - 125	104	75 - 125	<0.10	mg/kg			124	70 - 130
6636535	Total Nickel (Ni)	2013/03/12	105	75 - 125	103	75 - 125	<0.80	mg/kg			93	70 - 130
6636535	Total Selenium (Se)	2013/03/12	129(1)	75 - 125	101	75 - 125	<0.50	mg/kg				
6636535	Total Silver (Ag)	2013/03/12	100	75 - 125	98	75 - 125	<0.050	mg/kg				
6636535	Total Strontium (Sr)	2013/03/12	107	75 - 125	104	75 - 125	<0.10	mg/kg			107	70 - 130
6636535	Total Thallium (Tl)	2013/03/12	107	75 - 125	102	75 - 125	<0.050	mg/kg			94	70 - 130
6636535	Total Tin (Sn)	2013/03/12	101	75 - 125	101	75 - 125	<0.10	mg/kg				
6636535	Total Titanium (Ti)	2013/03/12	NC	75 - 125	104	75 - 125	<1.0	mg/kg			109	70 - 130
6636535	Total Uranium (U)	2013/03/12	105	75 - 125	104	75 - 125	<0.050	mg/kg			102	70 - 130
6636535	Total Vanadium (V)	2013/03/12	NC	75 - 125	96	75 - 125	<2.0	mg/kg			107	70 - 130
6636535	Total Zinc (Zn)	2013/03/12	NC	75 - 125	104	75 - 125	<1.0	mg/kg			96	70 - 130
6636535	Total Aluminum (Al)	2013/03/12					<100	mg/kg			109	70 - 130
6636535	Total Calcium (Ca)	2013/03/12					<100	mg/kg			95	70 - 130
6636535	Total Iron (Fe)	2013/03/12					<100	mg/kg			97	70 - 130
6636535	Total Magnesium (Mg)	2013/03/12					<100	mg/kg			98	70 - 130
6636535	Total Phosphorus (P)	2013/03/12					<10	mg/kg			99	70 - 130
6636535	Total Bismuth (Bi)	2013/03/12					<0.10	mg/kg				
6636535	Total Potassium (K)	2013/03/12					<100	mg/kg				
6636535	Total Sodium (Na)	2013/03/12					<100	mg/kg				
6636535	Total Zirconium (Zr)	2013/03/12					<0.50	mg/kg				
6636542	Soluble (2:1) pH	2013/03/12			102	96 - 104			0.4	20		
6638279	200 mesh (>.075 mm)	2013/03/11							5.3	35		
6638279	200 mesh (<.075 mm)	2013/03/11							4.5	35		
6641071	Total Antimony (Sb)	2013/03/13	100	75 - 125	100	75 - 125	<0.10	mg/kg	NC	30	88	70 - 130
6641071	Total Arsenic (As)	2013/03/13	105	75 - 125	100	75 - 125	<0.50	mg/kg	1.5	30	93	70 - 130
6641071	Total Barium (Ba)	2013/03/13	NC	75 - 125	104	75 - 125	<0.10	mg/kg	0.5	35	99	70 - 130

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6641071	Total Beryllium (Be)	2013/03/13	119	75 - 125	104	75 - 125	<0.40	mg/kg	NC	30		
6641071	Total Cadmium (Cd)	2013/03/13	114	75 - 125	106	75 - 125	<0.050	mg/kg	4.4	30	97	70 - 130
6641071	Total Chromium (Cr)	2013/03/13	103	75 - 125	102	75 - 125	<1.0	mg/kg	2.0	30	96	70 - 130
6641071	Total Cobalt (Co)	2013/03/13	104	75 - 125	105	75 - 125	<0.30	mg/kg	1.4	30	92	70 - 130
6641071	Total Copper (Cu)	2013/03/13	NC	75 - 125	104	75 - 125	<0.50	mg/kg	0.2	30	81	70 - 130
6641071	Total Lead (Pb)	2013/03/13	110	75 - 125	105	75 - 125	<0.10	mg/kg	1	35	96	70 - 130
6641071	Total Lithium (Li)	2013/03/13	108	75 - 125	103	75 - 125	<5.0	mg/kg	NC	30		
6641071	Total Manganese (Mn)	2013/03/13	NC	75 - 125	108	75 - 125	<0.20	mg/kg	0.3	30	99	70 - 130
6641071	Total Mercury (Hg)	2013/03/13	109	75 - 125	104	75 - 125	<0.050	mg/kg	NC	35	73	70 - 130
6641071	Total Molybdenum (Mo)	2013/03/13	109	75 - 125	105	75 - 125	<0.10	mg/kg	NC	35	97	70 - 130
6641071	Total Nickel (Ni)	2013/03/13	97	75 - 125	101	75 - 125	<0.80	mg/kg	0.8	30	87	70 - 130
6641071	Total Selenium (Se)	2013/03/13	122	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30		
6641071	Total Silver (Ag)	2013/03/13	101	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35		
6641071	Total Strontium (Sr)	2013/03/13	108	75 - 125	105	75 - 125	<0.10	mg/kg	1.7	35	102	70 - 130
6641071	Total Thallium (Tl)	2013/03/13	104	75 - 125	106	75 - 125	<0.050	mg/kg	NC	30	90	70 - 130
6641071	Total Tin (Sn)	2013/03/13	101	75 - 125	101	75 - 125	<0.10	mg/kg	NC	35		
6641071	Total Titanium (Ti)	2013/03/13	NC	75 - 125	104	75 - 125	<1.0	mg/kg	1	35	103	70 - 130
6641071	Total Uranium (U)	2013/03/13	106	75 - 125	104	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6641071	Total Vanadium (V)	2013/03/13	NC	75 - 125	102	75 - 125	<2.0	mg/kg	1.3	30	103	70 - 130
6641071	Total Zinc (Zn)	2013/03/13	NC	75 - 125	108	75 - 125	<1.0	mg/kg	0.2	30	91	70 - 130
6641071	Total Aluminum (Al)	2013/03/13					<100	mg/kg	1.6	35	104	70 - 130
6641071	Total Calcium (Ca)	2013/03/13					<100	mg/kg	5.9	30	93	70 - 130
6641071	Total Iron (Fe)	2013/03/13					<100	mg/kg	1.6	30	93	70 - 130
6641071	Total Magnesium (Mg)	2013/03/13					<100	mg/kg	1.2	30	92	70 - 130
6641071	Total Phosphorus (P)	2013/03/13					<10	mg/kg	1.7	30	94	70 - 130
6641071	Total Bismuth (Bi)	2013/03/13					<0.10	mg/kg	NC	30		
6641071	Total Potassium (K)	2013/03/13					<100	mg/kg	NC	35		
6641071	Total Sodium (Na)	2013/03/13					<100	mg/kg				
6641071	Total Zirconium (Zr)	2013/03/13					<0.50	mg/kg	0.8	30		
6641146	Soluble (2:1) pH	2013/03/14			102	96 - 104			0.5	20		
6643972	Moisture	2013/03/14					<0.30	%	0.8	20		
6646887	1,4-Difluorobenzene (sur.)	2013/03/13	115	70 - 130	99	70 - 130	96	%				
6646887	4-BROMOFLUOROBENZENE (sur.)	2013/03/13	99	70 - 130	97	70 - 130	100	%				
6646887	D10-ETHYLBENZENE (sur.)	2013/03/13	104	50 - 130	96	50 - 130	101	%				
6646887	D4-1,2-DICHLOROETHANE (sur.)	2013/03/13	105	70 - 130	105	70 - 130	102	%				
6646887	Benzene	2013/03/13	102	60 - 140	89	60 - 140	<0.0050	mg/kg	NC (2)	40		
6646887	Toluene	2013/03/13	121	60 - 140	105	60 - 140	<0.020	mg/kg	NC (2)	40		
6646887	Ethylbenzene	2013/03/13	116	60 - 140	100	60 - 140	<0.010	mg/kg	NC (2)	40		
6646887	m & p-Xylene	2013/03/13	112	60 - 140	96	60 - 140	<0.040	mg/kg	NC (2)	40		

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6646887	o-Xylene	2013/03/13	114	60 - 140	99	60 - 140	<0.040	mg/kg	NC(2)	40		
6646887	VH C6-C10	2013/03/13			101	60 - 140	<10	mg/kg	NC(2)	40		
6646887	(C6-C10)	2013/03/13			103	60 - 140	<10	mg/kg				
6646887	Methyl-tert-butylether(MTBE)	2013/03/13					<0.10	mg/kg	NC(2)	40		
6646887	Styrene	2013/03/13					<0.030	mg/kg	NC(2)	40		
6646887	Xylenes (Total)	2013/03/13					<0.040	mg/kg	NC	40		
6647950	Moisture	2013/03/14					<0.30	%	6.0	20		
6649596	D10-ANTHRACENE (sur.)	2013/03/15	76	60 - 130	82	60 - 130	80	%				
6649596	D8-ACENAPHTHYLENE (sur.)	2013/03/15	76	50 - 130	82	50 - 130	80	%				
6649596	D8-NAPHTHALENE (sur.)	2013/03/15	77	50 - 130	83	50 - 130	81	%				
6649596	TERPHENYL-D14 (sur.)	2013/03/15	82	60 - 130	88	60 - 130	89	%				
6649596	Naphthalene	2013/03/15	75	50 - 130	82	50 - 130	<0.010	mg/kg	NC	50		
6649596	2-Methylnaphthalene	2013/03/15	75	50 - 130	82	50 - 130	<0.020	mg/kg	NC	50		
6649596	Acenaphthylene	2013/03/15	75	50 - 130	81	50 - 130	<0.0050	mg/kg	NC	50		
6649596	Acenaphthene	2013/03/15	79	50 - 130	86	50 - 130	<0.0050	mg/kg	NC	50		
6649596	Fluorene	2013/03/15	79	50 - 130	84	50 - 130	<0.020	mg/kg	NC	50		
6649596	Phenanthrene	2013/03/15	67	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
6649596	Anthracene	2013/03/15	75	60 - 130	82	60 - 130	<0.0040	mg/kg	NC	50		
6649596	Fluoranthene	2013/03/15	71	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
6649596	Pyrene	2013/03/15	74	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
6649596	Benzo(a)anthracene	2013/03/15	72	60 - 130	80	60 - 130	<0.020	mg/kg	NC	50		
6649596	Chrysene	2013/03/15	78	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
6649596	Benzo(b&j)fluoranthene	2013/03/15	78	60 - 130	83	60 - 130	<0.020	mg/kg	NC	50		
6649596	Benzo(k)fluoranthene	2013/03/15	66	60 - 130	74	60 - 130	<0.020	mg/kg	NC	50		
6649596	Benzo(a)pyrene	2013/03/15	77	60 - 130	83	60 - 130	<0.020	mg/kg	NC	50		
6649596	Indeno(1,2,3-cd)pyrene	2013/03/15	76	60 - 130	75	60 - 130	<0.050	mg/kg	NC	50		
6649596	Dibenz(a,h)anthracene	2013/03/15	81	60 - 130	80	60 - 130	<0.050	mg/kg	NC	50		
6649596	Benzo(g,h,i)perylene	2013/03/15	77	60 - 130	79	60 - 130	<0.050	mg/kg	NC	50		
6649606	D10-ANTHRACENE (sur.)	2013/03/14	86	60 - 130	92	60 - 130	87	%				
6649606	D8-ACENAPHTHYLENE (sur.)	2013/03/14	81	50 - 130	88	50 - 130	84	%				
6649606	D8-NAPHTHALENE (sur.)	2013/03/14	85	50 - 130	90	50 - 130	85	%				
6649606	TERPHENYL-D14 (sur.)	2013/03/14	89	60 - 130	94	60 - 130	89	%				
6649606	Naphthalene	2013/03/14	83	50 - 130	87	50 - 130	<0.010	mg/kg	NC	50		
6649606	2-Methylnaphthalene	2013/03/14	84	50 - 130	86	50 - 130	<0.020	mg/kg	NC	50		
6649606	Acenaphthylene	2013/03/14	82	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
6649606	Acenaphthene	2013/03/14	87	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
6649606	Fluorene	2013/03/14	88	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6649606	Phenanthrene	2013/03/14	83	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
6649606	Anthracene	2013/03/14	88	60 - 130	93	60 - 130	<0.0040	mg/kg	NC	50		

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Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6649606	Fluoranthene	2013/03/14	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6649606	Pyrene	2013/03/14	84	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(a)anthracene	2013/03/14	85	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6649606	Chrysene	2013/03/14	84	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(b&j)fluoranthene	2013/03/14	82	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(k)fluoranthene	2013/03/14	79	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(a)pyrene	2013/03/14	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6649606	Indeno(1,2,3-cd)pyrene	2013/03/14	83	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
6649606	Dibenz(a,h)anthracene	2013/03/14	82	60 - 130	87	60 - 130	<0.050	mg/kg	NC	50		
6649606	Benzo(g,h,i)perylene	2013/03/14	77	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6650740	O-TERPHENYL (sur.)	2013/03/15	85	50 - 130	93	50 - 130	93	%				
6650740	F2 (C10-C16 Hydrocarbons)	2013/03/15	79	50 - 130	89	80 - 120	<10	mg/kg	NC	40		
6650740	F3 (C16-C34 Hydrocarbons)	2013/03/15	83	50 - 130	92	80 - 120	<10	mg/kg	NC	40		
6650740	F4 (C34-C50 Hydrocarbons)	2013/03/15	80	50 - 130	89	80 - 120	<10	mg/kg	24.7	40		
6650740	Reached Baseline at C50	2013/03/15					YES, RDL=N/A	mg/kg	NC	50		
6651827	Saturation %	2013/03/15			109	80 - 120	<1.0	%	0	30		
6651828	Soluble pH	2013/03/15			100	97 - 103			0	20		
6651829	Soluble Conductivity	2013/03/18			94	70 - 130	<1.0	uS/cm	4.8	35		
6651830	Saturation %	2013/03/15			109	80 - 120	<1.0	%	0.3	30		
6651831	Soluble pH	2013/03/15			100	97 - 103			0.6	20		
6651832	Soluble Conductivity	2013/03/18			95	70 - 130	1.1, RDL=1.0	uS/cm	2.3	35		
6651842	O-TERPHENYL (sur.)	2013/03/14	98	50 - 130	98	50 - 130	103	%				
6651842	EPH (C10-C19)	2013/03/14	92	50 - 130	94	50 - 130	<100	mg/kg	NC	40		
6651842	EPH (C19-C32)	2013/03/14	90	50 - 130	91	50 - 130	<100	mg/kg	NC	40		
6653868	Wet Soluble Calcium (Ca)	2013/03/18					<5.0	mg/L	4.8	30		
6653868	Wet Soluble Magnesium (Mg)	2013/03/18					<5.0	mg/L	NC	30		
6653868	Wet Soluble Potassium (K)	2013/03/18					<20	mg/L	NC	30		
6653868	Wet Soluble Sodium (Na)	2013/03/18					<5.0	mg/L	4.8	30		
6653868	Wet Soluble Sulphur (S)	2013/03/18					<30	mg/L	NC	30		
6653927	Wet Soluble Calcium (Ca)	2013/03/18					<5.0	mg/L	3.7	30		
6653927	Wet Soluble Magnesium (Mg)	2013/03/18					<5.0	mg/L	NC	30		
6653927	Wet Soluble Potassium (K)	2013/03/18					<20	mg/L	NC	30		
6653927	Wet Soluble Sodium (Na)	2013/03/18					<5.0	mg/L	0.3	30		
6653927	Wet Soluble Sulphur (S)	2013/03/18					<30	mg/L	NC	30		
6656226	Soluble Chloride (Cl)	2013/03/18					<5.0	mg/L	5.9	30		
6656229	Soluble Sulphate (SO4)	2013/03/18					<10	mg/L	8.0	30		
6656232	Soluble Chloride (Cl)	2013/03/18					5.2, RDL=5.0	mg/L	1.1	30		
6656235	Soluble Sulphate (SO4)	2013/03/18					<10	mg/L	1.3	30		
6663500	Initial pH of Sample	2013/03/20					4.98, RDL=N/A	pH Units	2.9	20		

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Success Through Science®

Maxxam Job #: B318611
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6663500	Final pH of Leachate	2013/03/20					4.98, RDL=N/A	pH Units	2.2	20		
6663500	pH of Leaching Fluid	2013/03/20					4.98, RDL=N/A	pH Units	0	20		
6663500	pH after HCl	2013/03/20							8.4	20		
6668255	LEACHATE Arsenic (As)	2013/03/20	100	75 - 125	99	75 - 125	<0.10	mg/L	NC	35		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 730 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B318611	353268
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#353268-20-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FV0912	SP13-113-130307	13/03/07		Soil		X	X						X			2	
2	FV0913	SP13-114-130307	↓		↓		X	X						X			↓	
3	FV0914	SP13-115-130307					X	X						X				
4	FV0915	SP13-116-130307					X	X						X				
5	FV0916	SP13-117-130307					X	X						X				
6	FV0917	SP13-118-130307					X	X						X				
7	FV0918	SP13-119-130307					X	X						X				
8	FV0919	SP13-120-130307					X	X	X	X	X			X				
9	FV0920	SP13-121-130307					X	X						X				
10	FV0921	SP13-121-01-130307	↓		↓		X	X						X			↓	8318611

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/07	16:24	[illegible]	2013/03/08	08:00		[ ]	6,6,6	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll free (800) 665 8566 Fax (604) 600 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B318611	353268
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#353268-21-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	CCME PAH in Sediments	CCME Hydrocarbons (F2-F4)	EPH in soil	CCME BTEX/F1 in Soil	TCLP Metals	Particulate Mesh 200	Salinity 4 Package for Soil			# of Bottles	Comments
1	FV0923	SP13-122-130307	13/03/07		Soil		X	X						X			2	
2	FV0924	SP13-123-130307					X	X						X				
3	FV0925	SP13-124-130307					X	X						X				
4	FV0926	SP13-125-130307					X	X						X				
5	FV0927	SP13-126-130307					X	X					X	X				
6	FV0928	SP13-127-130307					X	X						X				
7	FV0929	SP13-128-130307					X	X						X				
8	FV0930	SP13-129-130307					X	X						X				
9		SP13-68-130304	13/03/04		Soil		X	X						X			2	
10		Please see job# B317846																

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MK / MARK EDWARDS	13/03/07	16:20	Laurel Berthier	2013/03/08	08:00		[ ]	6,6,6	[x] Yes [ ] No

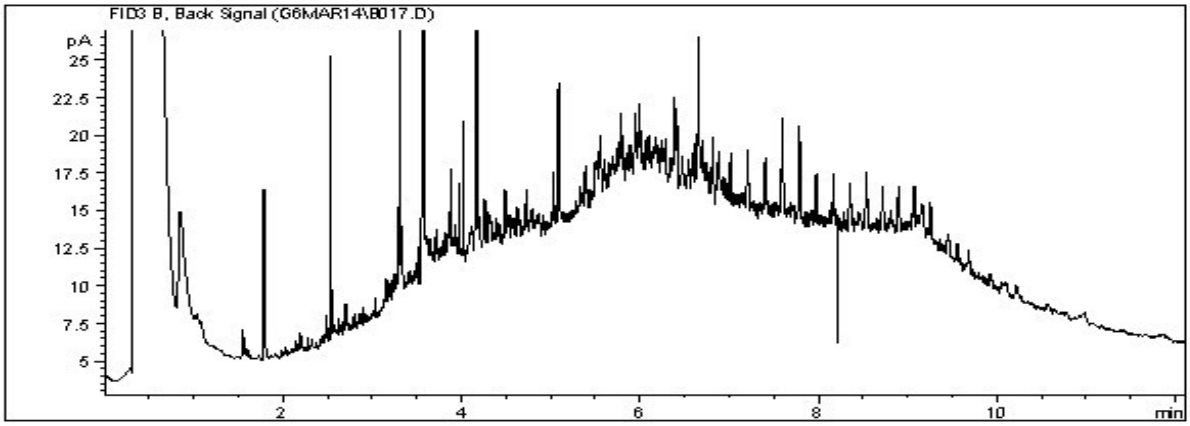
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

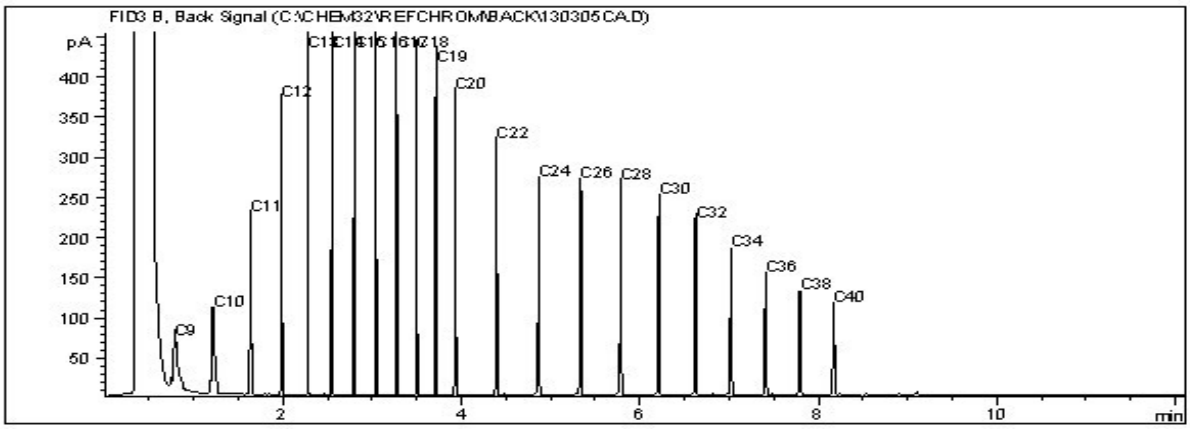
Report Date: 2013/03/21
Maxxam Job #: B318611
Maxxam Sample: FV0919

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-120-130307

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

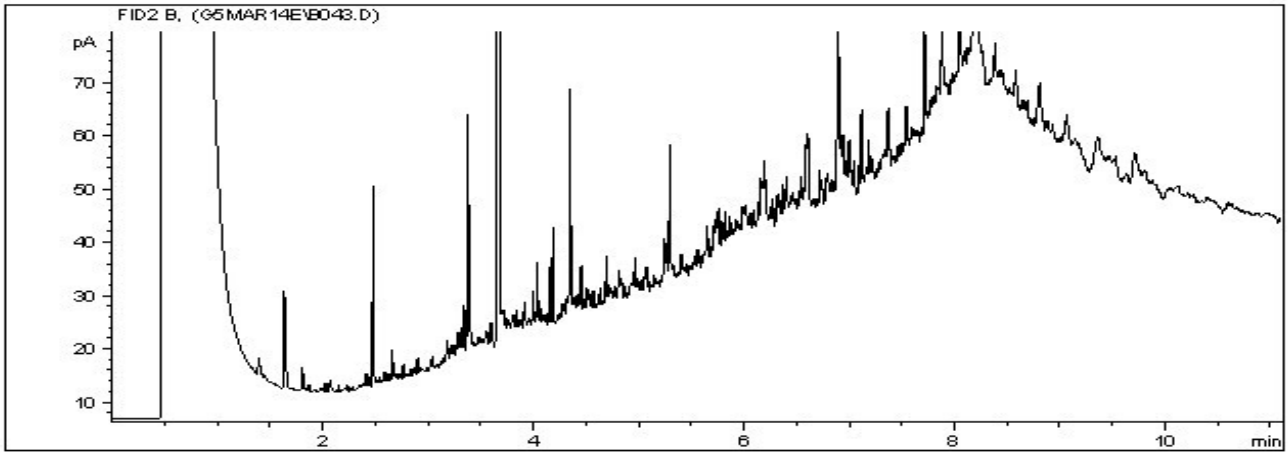
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

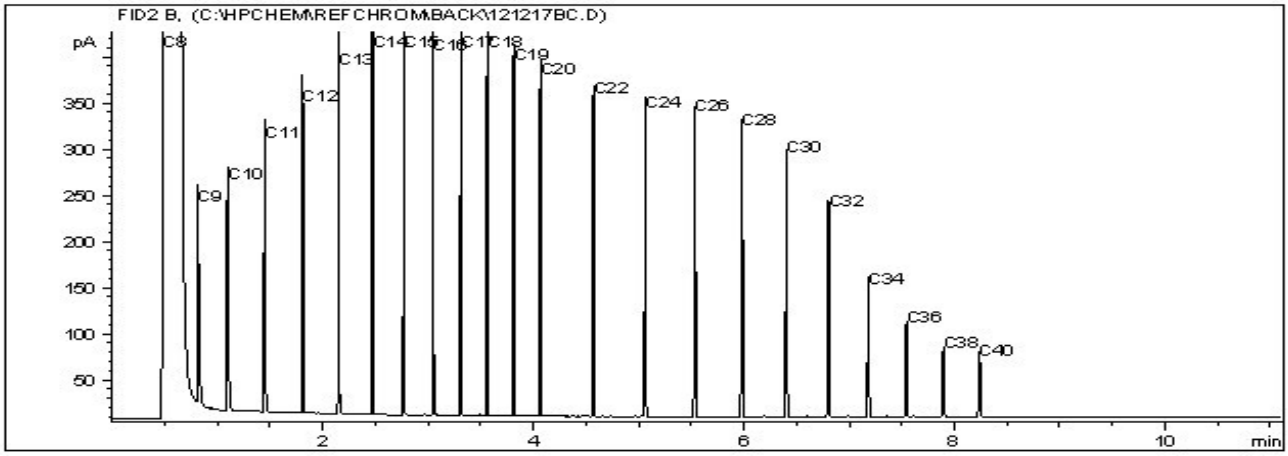
Report Date: 2013/03/21
Maxxam Job #: B318611
Maxxam Sample: FV0919

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-120-130307

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam

Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35477203, 35477204, 35477206

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/25
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B318798
Received: 2013/03/09, 09:20

Sample Matrix: Soil
Samples Received: 22

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	3	2013/03/11	2013/03/13	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/03/11	2013/03/14	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	20	2013/03/18	2013/03/19	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	2	2013/03/18	2013/03/20	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	22	2013/03/18	2013/03/20	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	3	N/A	2013/03/14	BBY WI-00033	BC MOE Lab Method
Volatile F1-BTEX	2	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	1	2013/03/11	2013/03/13	BBY8SOP-00030	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	4	2013/03/11	2013/03/18	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	22	2013/03/12	2013/03/13	BBY7SOP-00001	EPA 6020A
Moisture	4	N/A	2013/03/12	BBY8SOP-00017	Ont MOE -E 3139
Moisture	18	N/A	2013/03/13	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/11	2013/03/15	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/03/11	2013/03/16	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	2	2013/03/12	2013/03/15	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	13	2013/03/12	2013/03/16	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/12	2013/03/18	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/13	2013/03/13	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/14	2013/03/14	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	1	N/A	2013/03/13	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	1	N/A	2013/03/14	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	3	N/A	2013/03/15	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	16	N/A	2013/03/18	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	1	N/A	2013/03/19	BBY WI-00033	CCME Guidelines
PAH on Leachate by GC/MS (SIM)	1	2013/03/23	2013/03/24	BBY8SOP-00021	EPA 8270D
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/25	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/13	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/14	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	3	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	16	N/A	2013/03/18	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	22	2013/03/14	2013/03/14	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	22	2013/03/18	2013/03/19	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	22	N/A	2013/03/14		
Saturated Paste	22	2013/03/18	2013/03/19	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	22	N/A	2013/03/20		
Sulphate (soluble) (soil)	20	2013/03/18	2013/03/19	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	2	2013/03/18	2013/03/20	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	22	N/A	2013/03/20	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	5	N/A	2013/03/18	BBY WI-00033	BC MOE Lab Method

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Sample Matrix: Soil
Samples Received: 22

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BC Hydrocarbons in Soil by GC/FID	1	2013/03/11	2013/03/14	BBY8SOP-00029	BC Env Lab Manual
BC Hydrocarbons in Soil by GC/FID	4	2013/03/11	2013/03/18	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	3	N/A	2013/03/14	BBY WI-00033	BC MOE Lab Method
Volatile HC-BTEX	2	N/A	2013/03/15	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FV2197		FV2199		
Sampling Date		2013/03/08		2013/03/08		
	UNITS	**SP13-135-130308**	**QC Batch**	**SP13-137-130308**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	13	6656160	100	10	6643927
F3 (C16-C34 Hydrocarbons)	mg/kg	94	6656160	1200	10	6643927
F4 (C34-C50 Hydrocarbons)	mg/kg	60	6656160	670	10	6643927
Reached Baseline at C50	mg/kg	YES	6656160	YES	N/A	6643927
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	99	6656160	116		6643927

Maxxam ID		FV2199		FV2206	FV2210	FV2217		
Sampling Date		2013/03/08		2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-137-130308 Lab-Dup**	**QC Batch**	**SP13-143-130308**	**SP13-147-130308**	**SP13-153-130308**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	120	6643927	12	<10	20	10	6656160
F3 (C16-C34 Hydrocarbons)	mg/kg	990	6643927	160	200	250	10	6656160
F4 (C34-C50 Hydrocarbons)	mg/kg	480	6643927	110	170	160	10	6656160
Reached Baseline at C50	mg/kg	YES	6643927	YES	YES	YES	N/A	6656160
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	112	6643927	101	102	111		6656160

PHYSICAL TESTING (SOIL)

Maxxam ID		FV2197		FV2198		FV2199		FV2200		
Sampling Date		2013/03/08		2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-135-130308**	**QC Batch**	**SP13-136-130308**	**QC Batch**	**SP13-137-130308**	**QC Batch**	**SP13-138-130308**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	20	6635246	19	6640023	15	6635246	16	0.30	6640022

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FV2201		FV2202	FV2203	FV2204		FV2205		
Sampling Date		2013/03/08		2013/03/08	2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-139-130308**	**QC Batch**	**SP13-140-130308**	**SP13-140-01-130308**	**SP13-141-130308**	**QC Batch**	**SP13-142-130308**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	17	6640023	17	19	18	6640022	19	0.30	6640023

Maxxam ID		FV2206		FV2207		FV2208	FV2209		
Sampling Date		2013/03/08		2013/03/08		2013/03/08	2013/03/08		
	UNITS	**SP13-143-130308**	**QC Batch**	**SP13-144-130308**	**QC Batch**	**SP13-145-130308**	**SP13-146-130308**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	27	6635246	18	6640022	15	21	0.30	6640023

Maxxam ID		FV2210	FV2210		FV2211		FV2212		
Sampling Date		2013/03/08	2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-147-130308**	**SP13-147-130308 Lab-Dup**	**QC Batch**	**SP13-148-130308**	**QC Batch**	**SP13-149-130308**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	17	17	6635246	16	6640023	15	0.30	6640022

Maxxam ID		FV2213		FV2214		FV2215		
Sampling Date		2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-150-130308**	**QC Batch**	**SP13-150-01-130308**	**QC Batch**	**SP13-151-130308**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	16	6640023	16	6640022	19	0.30	6640023

Maxxam ID		FV2216		FV2217		FV2218		
Sampling Date		2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-152-130308**	**QC Batch**	**SP13-153-130308**	**QC Batch**	**SP13-154-130308**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	16	6640023	16	6635251	20	0.30	6640023

RDL = Reportable Detection Limit

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Success Through Science®

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FV2197	FV2199	FV2206	FV2210		FV2217	FV2217		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		2013/03/08	2013/03/08		
	UNITS	**SP13-135-130308**	**SP13-137-130308**	**SP13-143-130308**	**SP13-147-130308**	**QC Batch**	**SP13-153-130308**	**SP13-153-130308 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters										
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	<100	<100	6634961	<100		100	6634961
HEPH (C19-C32 less PAH)	mg/kg	<100	407	123	153	6634961	243		100	6634961
Hydrocarbons										
EPH (C10-C19)	mg/kg	<100	100	<100	<100	6657574	<100	<100	100	6650983
EPH (C19-C32)	mg/kg	<100	407	124	153	6657574	243	232	100	6650983
Surrogate Recovery (%)										
O-TERPHENYL (sur.)	%	112	108	108	112	6657574	96	93		6650983

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FV2197		FV2199		
Sampling Date		2013/03/08		2013/03/08		
	UNITS	**SP13-135-130308**	**QC Batch**	**SP13-137-130308**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	mg/kg	<10	6634956	<10	10	6634956
Volatiles						
VPH (VH6 to 10 - BTEX)	mg/kg	<10	6634962	<10	10	6634962
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	6645311	<0.10	0.10	6647330
Benzene	mg/kg	<0.0050	6645311	<0.0050	0.0050	6647330
Toluene	mg/kg	<0.020	6645311	<0.020	0.020	6647330
Ethylbenzene	mg/kg	<0.010	6645311	<0.010	0.010	6647330
m & p-Xylene	mg/kg	<0.040	6645311	<0.040	0.040	6647330
o-Xylene	mg/kg	<0.040	6645311	<0.040	0.040	6647330
Styrene	mg/kg	<0.030	6645311	<0.030	0.030	6647330
Xylenes (Total)	mg/kg	<0.040	6645311	<0.040	0.040	6647330
VH C6-C10	mg/kg	<10	6645311	<10	10	6647330
(C6-C10)	mg/kg	<10	6645311	<10	10	6647330
Surrogate Recovery (%)						
1,4-Difluorobenzene (sur.)	%	101	6645311	92		6647330
4-BROMOFLUOROBENZENE (sur.)	%	98	6645311	104		6647330
D10-ETHYLBENZENE (sur.)	%	99	6645311	107		6647330
D4-1,2-DICHLOROETHANE (sur.)	%	102	6645311	106		6647330

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FV2206	FV2210		FV2217		
Sampling Date		2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-143-130308**	**SP13-147-130308**	**QC Batch**	**SP13-153-130308**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	6634956	<10	10	6634956
Volatiles							
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	6634962	<10	10	6634962
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	6645311	<0.10	0.10	6646887
Benzene	mg/kg	<0.0050	<0.0050	6645311	<0.0050	0.0050	6646887
Toluene	mg/kg	<0.020	<0.020	6645311	<0.020	0.020	6646887
Ethylbenzene	mg/kg	<0.010	<0.010	6645311	<0.010	0.010	6646887
m & p-Xylene	mg/kg	<0.040	<0.040	6645311	<0.040	0.040	6646887
o-Xylene	mg/kg	<0.040	<0.040	6645311	<0.040	0.040	6646887
Styrene	mg/kg	<0.030	<0.030	6645311	<0.030	0.030	6646887
Xylenes (Total)	mg/kg	<0.040	<0.040	6645311	<0.040	0.040	6646887
VH C6-C10	mg/kg	<10	<10	6645311	<10	10	6646887
(C6-C10)	mg/kg	<10	<10	6645311	<10	10	6646887
Surrogate Recovery (%)							
1,4-Difluorobenzene (sur.)	%	101	100	6645311	97		6646887
4-BROMOFLUOROBENZENE (sur.)	%	97	100	6645311	99		6646887
D10-ETHYLBENZENE (sur.)	%	102	101	6645311	109		6646887
D4-1,2-DICHLOROETHANE (sur.)	%	101	102	6645311	106		6646887

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV2197	FV2198	FV2199	FV2200		FV2201		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-135-130308**	**SP13-136-130308**	**SP13-137-130308**	**SP13-138-130308**	**QC Batch**	**SP13-139-130308**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.61	7.83	7.85	7.31	6641193	7.92	0.010	6641196
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	19100	18400	18000	20200	6641147	19400	100	6641195
Total Antimony (Sb)	mg/kg	12.5	26.7	26.7	26.3	6641147	28.8	0.10	6641195
Total Arsenic (As)	mg/kg	32.4	48.6	46.4	42.8	6641147	56.6	0.50	6641195
Total Barium (Ba)	mg/kg	83.7	82.0	82.6	78.5	6641147	107	0.10	6641195
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	6641147	<0.40	0.40	6641195
Total Bismuth (Bi)	mg/kg	0.18	0.20	0.17	0.21	6641147	0.18	0.10	6641195
Total Cadmium (Cd)	mg/kg	0.393	0.373	0.429	0.309	6641147	0.408	0.050	6641195
Total Calcium (Ca)	mg/kg	8860	8850	13500	8300	6641147	10300	100	6641195
Total Chromium (Cr)	mg/kg	35.7	33.6	43.4	36.4	6641147	39.2	1.0	6641195
Total Cobalt (Co)	mg/kg	11.1	13.2	12.1	12.4	6641147	14.0	0.30	6641195
Total Copper (Cu)	mg/kg	73.1	109	110	74.3	6641147	134	0.50	6641195
Total Iron (Fe)	mg/kg	26500	27100	24800	27100	6641147	32100	100	6641195
Total Lead (Pb)	mg/kg	36.1	68.1	61.8	45.0	6641147	67.7	0.10	6641195
Total Lithium (Li)	mg/kg	14.7	11.6	11.4	11.9	6641147	12.0	5.0	6641195
Total Magnesium (Mg)	mg/kg	6130	6980	6860	7130	6641147	7020	100	6641195
Total Manganese (Mn)	mg/kg	410	443	428	486	6641147	448	0.20	6641195
Total Mercury (Hg)	mg/kg	0.128	0.178	0.218	0.081	6641147	0.171	0.050	6641195
Total Molybdenum (Mo)	mg/kg	3.04	3.61	3.03	3.38	6641147	3.54	0.10	6641195
Total Nickel (Ni)	mg/kg	46.6	26.3	30.3	28.1	6641147	27.2	0.80	6641195
Total Phosphorus (P)	mg/kg	454	540	532	435	6641147	506	10	6641195
Total Potassium (K)	mg/kg	610	560	584	497	6641147	746	100	6641195
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6641147	<0.50	0.50	6641195
Total Silver (Ag)	mg/kg	0.121	0.110	0.120	0.087	6641147	0.161	0.050	6641195
Total Sodium (Na)	mg/kg	238	290	284	285	6641147	425	100	6641195
Total Strontium (Sr)	mg/kg	49.1	50.7	64.7	48.7	6641147	61.3	0.10	6641195
Total Thallium (Tl)	mg/kg	0.070	0.073	0.067	0.071	6641147	0.081	0.050	6641195
Total Tin (Sn)	mg/kg	2.57	5.21	4.58	4.28	6641147	4.95	0.10	6641195
Total Titanium (Ti)	mg/kg	762	774	860	905	6641147	970	1.0	6641195
Total Uranium (U)	mg/kg	0.799	0.825	1.02	1.04	6641147	1.32	0.050	6641195
Total Vanadium (V)	mg/kg	66.7	63.8	61.2	67.4	6641147	69.3	2.0	6641195
Total Zinc (Zn)	mg/kg	212	312	301	272	6641147	473	1.0	6641195
Total Zirconium (Zr)	mg/kg	2.27	1.99	1.91	1.83	6641147	2.51	0.50	6641195

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV2202	FV2203	FV2204	FV2205		FV2206		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-140-130308**	**SP13-140-01-130308**	**SP13-141-130308**	**SP13-142-130308**	**QC Batch**	**SP13-143-130308**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.72	7.77	7.83	7.67	6641193	7.55	0.010	6641196
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20200	19200	18300	19500	6641147	20800	100	6641195
Total Antimony (Sb)	mg/kg	25.0	30.0	42.4	25.9	6641147	46.4	0.10	6641195
Total Arsenic (As)	mg/kg	49.6	60.0	80.8	57.5	6641147	91.9	0.50	6641195
Total Barium (Ba)	mg/kg	82.2	79.1	88.4	81.5	6641147	98.6	0.10	6641195
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	0.43	6641147	<0.40	0.40	6641195
Total Bismuth (Bi)	mg/kg	0.21	0.18	0.22	0.20	6641147	0.39	0.10	6641195
Total Cadmium (Cd)	mg/kg	0.405	0.437	0.466	0.695	6641147	0.542	0.050	6641195
Total Calcium (Ca)	mg/kg	9690	11500	12500	14700	6641147	10400	100	6641195
Total Chromium (Cr)	mg/kg	43.7	42.9	40.7	36.5	6641147	43.5	1.0	6641195
Total Cobalt (Co)	mg/kg	13.3	14.0	15.0	12.7	6641147	16.1	0.30	6641195
Total Copper (Cu)	mg/kg	168	112	151	103	6641147	116	0.50	6641195
Total Iron (Fe)	mg/kg	27100	27700	29300	28500	6641147	30700	100	6641195
Total Lead (Pb)	mg/kg	66.3	74.2	83.5	63.4	6641147	94.1	0.10	6641195
Total Lithium (Li)	mg/kg	12.0	11.4	11.3	12.0	6641147	11.2	5.0	6641195
Total Magnesium (Mg)	mg/kg	7390	7480	7830	8360	6641147	8460	100	6641195
Total Manganese (Mn)	mg/kg	462	767	459	462	6641147	534	0.20	6641195
Total Mercury (Hg)	mg/kg	0.208	0.189	0.159	0.140	6641147	0.109	0.050	6641195
Total Molybdenum (Mo)	mg/kg	3.52	4.38	4.42	7.56	6641147	5.21	0.10	6641195
Total Nickel (Ni)	mg/kg	29.0	29.2	27.7	27.1	6641147	29.8	0.80	6641195
Total Phosphorus (P)	mg/kg	501	487	549	505	6641147	652	10	6641195
Total Potassium (K)	mg/kg	600	575	613	530	6641147	666	100	6641195
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6641147	<0.50	0.50	6641195
Total Silver (Ag)	mg/kg	0.153	0.164	0.258	0.130	6641147	0.147	0.050	6641195
Total Sodium (Na)	mg/kg	306	292	337	327	6641147	319	100	6641195
Total Strontium (Sr)	mg/kg	58.4	70.1	68.3	68.0	6641147	55.7	0.10	6641195
Total Thallium (Tl)	mg/kg	0.069	0.072	0.080	0.067	6641147	0.082	0.050	6641195
Total Tin (Sn)	mg/kg	10.4	6.14	12.4	4.74	6641147	7.13	0.10	6641195
Total Titanium (Ti)	mg/kg	943	924	896	887	6641147	1010	1.0	6641195
Total Uranium (U)	mg/kg	1.42	1.28	1.37	2.02	6641147	1.36	0.050	6641195
Total Vanadium (V)	mg/kg	68.0	66.5	64.7	65.0	6641147	71.1	2.0	6641195
Total Zinc (Zn)	mg/kg	298	495	459	336	6641147	470	1.0	6641195
Total Zirconium (Zr)	mg/kg	2.40	2.42	2.44	3.66	6641147	2.97	0.50	6641195

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV2207	FV2208	FV2209	FV2210		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-144-130308**	**SP13-145-130308**	**SP13-146-130308**	**SP13-147-130308**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	7.66	7.68	7.49	7.57	0.010	6641193
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	19700	18600	20800	20400	100	6641147
Total Antimony (Sb)	mg/kg	28.6	26.0	13.9	10.8	0.10	6641147
Total Arsenic (As)	mg/kg	67.5	46.3	26.8	26.1	0.50	6641147
Total Barium (Ba)	mg/kg	93.2	75.2	97.8	80.1	0.10	6641147
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.48	<0.40	0.40	6641147
Total Bismuth (Bi)	mg/kg	0.18	0.13	0.11	0.10	0.10	6641147
Total Cadmium (Cd)	mg/kg	0.423	0.381	0.399	0.313	0.050	6641147
Total Calcium (Ca)	mg/kg	10200	11200	10300	9930	100	6641147
Total Chromium (Cr)	mg/kg	39.6	33.8	36.9	38.1	1.0	6641147
Total Cobalt (Co)	mg/kg	14.7	12.9	13.6	13.6	0.30	6641147
Total Copper (Cu)	mg/kg	98.2	77.7	63.6	75.8	0.50	6641147
Total Iron (Fe)	mg/kg	29400	28000	29600	29600	100	6641147
Total Lead (Pb)	mg/kg	69.9	49.3	50.2	32.1	0.10	6641147
Total Lithium (Li)	mg/kg	12.0	11.2	13.0	13.2	5.0	6641147
Total Magnesium (Mg)	mg/kg	7730	7730	8560	8640	100	6641147
Total Manganese (Mn)	mg/kg	518	460	539	508	0.20	6641147
Total Mercury (Hg)	mg/kg	0.158	0.096	0.386	0.074	0.050	6641147
Total Molybdenum (Mo)	mg/kg	5.23	3.19	1.93	2.22	0.10	6641147
Total Nickel (Ni)	mg/kg	29.2	26.0	29.8	29.0	0.80	6641147
Total Phosphorus (P)	mg/kg	551	499	1170	513	10	6641147
Total Potassium (K)	mg/kg	636	563	686	626	100	6641147
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.50	6641147
Total Silver (Ag)	mg/kg	0.120	0.133	0.099	0.096	0.050	6641147
Total Sodium (Na)	mg/kg	349	285	318	262	100	6641147
Total Strontium (Sr)	mg/kg	59.5	60.9	70.8	54.9	0.10	6641147
Total Thallium (Tl)	mg/kg	0.067	0.062	0.054	0.056	0.050	6641147
Total Tin (Sn)	mg/kg	4.97	7.14	3.08	3.17	0.10	6641147
Total Titanium (Ti)	mg/kg	939	951	922	1050	1.0	6641147
Total Uranium (U)	mg/kg	1.64	1.68	1.01	1.28	0.050	6641147
Total Vanadium (V)	mg/kg	69.9	66.1	71.9	74.7	2.0	6641147
Total Zinc (Zn)	mg/kg	329	253	175	160	1.0	6641147
Total Zirconium (Zr)	mg/kg	2.95	3.36	3.36	4.03	0.50	6641147

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV2211		FV2212	FV2213	FV2214		
Sampling Date		2013/03/08		2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-148-130308**	**QC Batch**	**SP13-149-130308**	**SP13-150-130308**	**SP13-150-01-130308**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.48	6641196	7.77	7.96	7.90	0.010	6641193
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	18700	6641195	19300	18500	19400	100	6641147
Total Antimony (Sb)	mg/kg	18.4	6641195	31.4	44.2	35.2	0.10	6641147
Total Arsenic (As)	mg/kg	33.6	6641195	53.0	94.6	72.2	0.50	6641147
Total Barium (Ba)	mg/kg	90.0	6641195	94.7	107	105	0.10	6641147
Total Beryllium (Be)	mg/kg	0.40	6641195	<0.40	<0.40	0.42	0.40	6641147
Total Bismuth (Bi)	mg/kg	0.11	6641195	0.19	0.34	0.29	0.10	6641147
Total Cadmium (Cd)	mg/kg	0.325	6641195	0.496	0.537	0.698	0.050	6641147
Total Calcium (Ca)	mg/kg	9110	6641195	10600	14500	14000	100	6641147
Total Chromium (Cr)	mg/kg	32.9	6641195	44.2	57.4	56.6	1.0	6641147
Total Cobalt (Co)	mg/kg	11.6	6641195	14.3	16.2	14.5	0.30	6641147
Total Copper (Cu)	mg/kg	60.2	6641195	151	245	272	0.50	6641147
Total Iron (Fe)	mg/kg	26300	6641195	31900	31800	30800	100	6641147
Total Lead (Pb)	mg/kg	53.1	6641195	87.2	121	137	0.10	6641147
Total Lithium (Li)	mg/kg	11.1	6641195	11.7	11.3	11.2	5.0	6641147
Total Magnesium (Mg)	mg/kg	7200	6641195	8370	8690	8460	100	6641147
Total Manganese (Mn)	mg/kg	483	6641195	532	498	509	0.20	6641147
Total Mercury (Hg)	mg/kg	0.088	6641195	0.248	0.313	0.405	0.050	6641147
Total Molybdenum (Mo)	mg/kg	2.02	6641195	3.89	6.85	5.82	0.10	6641147
Total Nickel (Ni)	mg/kg	24.1	6641195	31.5	44.9	34.4	0.80	6641147
Total Phosphorus (P)	mg/kg	593	6641195	642	605	620	10	6641147
Total Potassium (K)	mg/kg	595	6641195	614	676	678	100	6641147
Total Selenium (Se)	mg/kg	<0.50	6641195	<0.50	<0.50	<0.50	0.50	6641147
Total Silver (Ag)	mg/kg	0.115	6641195	0.211	0.189	0.216	0.050	6641147
Total Sodium (Na)	mg/kg	278	6641195	289	423	346	100	6641147
Total Strontium (Sr)	mg/kg	51.4	6641195	64.1	89.8	90.7	0.10	6641147
Total Thallium (Tl)	mg/kg	0.059	6641195	0.069	0.087	0.083	0.050	6641147
Total Tin (Sn)	mg/kg	4.62	6641195	21.1	9.15	8.12	0.10	6641147
Total Titanium (Ti)	mg/kg	922	6641195	1000	917	989	1.0	6641147
Total Uranium (U)	mg/kg	1.04	6641195	0.945	1.31	1.58	0.050	6641147
Total Vanadium (V)	mg/kg	66.0	6641195	69.9	65.6	68.3	2.0	6641147
Total Zinc (Zn)	mg/kg	186	6641195	375	639	581	1.0	6641147
Total Zirconium (Zr)	mg/kg	2.81	6641195	3.11	2.71	2.70	0.50	6641147

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV2215	FV2216		FV2217	FV2218		
Sampling Date		2013/03/08	2013/03/08		2013/03/08	2013/03/08		
	UNITS	**SP13-151-130308**	**SP13-152-130308**	**QC Batch**	**SP13-153-130308**	**SP13-154-130308**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.56	7.93	6641193	7.60	7.51	0.010	6641196
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	21700	19300	6641147	19500	21300	100	6641195
Total Antimony (Sb)	mg/kg	21.0	50.0	6641147	27.7	16.3	0.10	6641195
Total Arsenic (As)	mg/kg	41.0	85.4	6641147	58.2	41.2	0.50	6641195
Total Barium (Ba)	mg/kg	103	94.2	6641147	88.5	98.5	0.10	6641195
Total Beryllium (Be)	mg/kg	<0.40	<0.40	6641147	<0.40	<0.40	0.40	6641195
Total Bismuth (Bi)	mg/kg	0.16	0.26	6641147	0.20	0.16	0.10	6641195
Total Cadmium (Cd)	mg/kg	0.509	0.629	6641147	0.308	0.408	0.050	6641195
Total Calcium (Ca)	mg/kg	9960	15900	6641147	14100	11400	100	6641195
Total Chromium (Cr)	mg/kg	44.5	55.1	6641147	41.7	43.8	1.0	6641195
Total Cobalt (Co)	mg/kg	13.4	15.7	6641147	15.3	13.8	0.30	6641195
Total Copper (Cu)	mg/kg	134	329	6641147	139	145	0.50	6641195
Total Iron (Fe)	mg/kg	30500	32000	6641147	30800	31100	100	6641195
Total Lead (Pb)	mg/kg	62.0	117	6641147	69.6	60.2	0.10	6641195
Total Lithium (Li)	mg/kg	12.0	12.0	6641147	12.1	12.2	5.0	6641195
Total Magnesium (Mg)	mg/kg	7840	9060	6641147	9000	8520	100	6641195
Total Manganese (Mn)	mg/kg	555	520	6641147	571	573	0.20	6641195
Total Mercury (Hg)	mg/kg	0.213	0.302	6641147	0.180	0.164	0.050	6641195
Total Molybdenum (Mo)	mg/kg	2.89	8.31	6641147	3.56	2.97	0.10	6641195
Total Nickel (Ni)	mg/kg	31.1	35.3	6641147	30.4	31.4	0.80	6641195
Total Phosphorus (P)	mg/kg	703	645	6641147	604	741	10	6641195
Total Potassium (K)	mg/kg	705	643	6641147	725	730	100	6641195
Total Selenium (Se)	mg/kg	<0.50	<0.50	6641147	<0.50	<0.50	0.50	6641195
Total Silver (Ag)	mg/kg	0.141	0.200	6641147	0.134	0.104	0.050	6641195
Total Sodium (Na)	mg/kg	273	345	6641147	303	222	100	6641195
Total Strontium (Sr)	mg/kg	61.5	81.7	6641147	88.8	63.6	0.10	6641195
Total Thallium (Tl)	mg/kg	0.076	0.086	6641147	0.070	0.060	0.050	6641195
Total Tin (Sn)	mg/kg	4.24	9.15	6641147	5.19	4.67	0.10	6641195
Total Titanium (Ti)	mg/kg	1000	1020	6641147	809	996	1.0	6641195
Total Uranium (U)	mg/kg	0.989	1.09	6641147	1.00	0.931	0.050	6641195
Total Vanadium (V)	mg/kg	71.5	70.3	6641147	68.7	72.7	2.0	6641195
Total Zinc (Zn)	mg/kg	316	502	6641147	333	316	1.0	6641195
Total Zirconium (Zr)	mg/kg	2.87	2.88	6641147	2.75	2.77	0.50	6641195

RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2197	FV2198			FV2199	FV2199		
Sampling Date		2013/03/08	2013/03/08			2013/03/08	2013/03/08		
	UNITS	**SP13-135-130308**	**SP13-136-130308**	**RDL**	**QC Batch**	**SP13-137-130308**	**SP13-137-130308 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.43	2.1	0.10	6634957	3.9		0.10	6634957
Benzo[a]pyrene equivalency	N/A	<0.10	0.19	0.10	6634957	0.42		0.10	6634957
Polycyclic Aromatics									
Naphthalene	mg/kg	0.010	0.039	0.010	6649606	<0.10(1)	<0.10(1)	0.10	6643812
2-Methylnaphthalene	mg/kg	<0.020	0.069	0.020	6649606	<0.20(1)	<0.20(1)	0.20	6643812
Acenaphthylene	mg/kg	<0.0050	0.026	0.0050	6649606	<0.050(1)	<0.050(1)	0.050	6643812
Acenaphthene	mg/kg	0.0068	0.036	0.0050	6649606	<0.050(1)	<0.050(1)	0.050	6643812
Fluorene	mg/kg	<0.020	0.048	0.020	6649606	<0.20(1)	<0.20(1)	0.20	6643812
Phenanthrene	mg/kg	0.031	0.18	0.020	6649606	0.28(1)	<0.20(1)	0.20	6643812
Anthracene	mg/kg	0.0083	0.044	0.0040	6649606	0.076(1)	0.046(1)	0.040	6643812
Fluoranthene	mg/kg	0.036	0.22	0.020	6649606	0.36(1)	0.26(1)	0.20	6643812
Pyrene	mg/kg	0.044	0.25	0.020	6649606	0.38(1)	0.45(1)	0.20	6643812
Benzo(a)anthracene	mg/kg	<0.020	0.10	0.020	6649606	<0.20(1)	<0.20(1)	0.20	6643812
Chrysene	mg/kg	0.029	0.15	0.020	6649606	0.20(1)	0.21(1)	0.20	6643812
Benzo(b&j)fluoranthene	mg/kg	0.028	0.15	0.020	6649606	0.22(1)	<0.20(1)	0.20	6643812
Benzo(k)fluoranthene	mg/kg	<0.020	0.048	0.020	6649606	<0.20(1)	<0.20(1)	0.20	6643812
Benzo(a)pyrene	mg/kg	<0.020	0.12	0.020	6649606	<0.20(1)	<0.20(1)	0.20	6643812
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.071	0.050	6649606	<0.50(1)	<0.50(1)	0.50	6643812
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	0.050	6649606	<0.50(1)	<0.50(1)	0.50	6643812
Benzo(g,h,i)perylene	mg/kg	<0.050	0.083	0.050	6649606	<0.50(1)	<0.50(1)	0.50	6643812
Low Molecular Weight PAH`s	mg/kg	0.056	0.45	0.050	6634958	<0.50		0.50	6634958
High Molecular Weight PAH`s	mg/kg	0.14	1.3	0.050	6634958	1.2		0.50	6634958
Total PAH	mg/kg	0.19	1.7	0.050	6634958	1.5		0.50	6634958
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	90	86		6649606	105	103		6643812
D8-ACENAPHTHYLENE (sur.)	%	90	85		6649606	95	94		6643812
D8-NAPHTHALENE (sur.)	%	95	89		6649606	96	94		6643812
TERPHENYL-D14 (sur.)	%	100	89		6649606	104	102		6643812

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2200		FV2201		FV2202	FV2203		
Sampling Date		2013/03/08		2013/03/08		2013/03/08	2013/03/08		
	UNITS	**SP13-138-130308**	**QC Batch**	**SP13-139-130308**	**QC Batch**	**SP13-140-130308**	**SP13-140-01-130308**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.87	6634957	1.9	6634957	18	2.8	0.10	6634957
Benzo[a]pyrene equivalency	N/A	<0.10	6634957	0.16	6634957	1.4	0.23	0.10	6634957
Polycyclic Aromatics									
Naphthalene	mg/kg	0.11	6649606	0.028	6661338	0.31	0.035	0.010	6655902
2-Methylnaphthalene	mg/kg	0.35	6649606	0.037	6661338	0.51	0.053	0.020	6655902
Acenaphthylene	mg/kg	0.014	6649606	0.021	6661338	0.53	0.031	0.0050	6655902
Acenaphthene	mg/kg	0.045	6649606	0.026	6661338	0.091	0.038	0.0050	6655902
Fluorene	mg/kg	0.059	6649606	0.036	6661338	0.37	0.044	0.020	6655902
Phenanthrene	mg/kg	0.15	6649606	0.15	6661338	5.0	0.31	0.020	6655902
Anthracene	mg/kg	0.029	6649606	0.038	6661338	0.59	0.062	0.0040	6655902
Fluoranthene	mg/kg	0.086	6649606	0.20	6661338	3.5	0.36	0.020	6655902
Pyrene	mg/kg	0.12	6649606	0.21	6661338	3.3	0.37	0.020	6655902
Benzo(a)anthracene	mg/kg	0.042	6649606	0.090	6661338	1.3	0.16	0.020	6655902
Chrysene	mg/kg	0.076	6649606	0.13	6661338	1.3	0.19	0.020	6655902
Benzo(b&j)fluoranthene	mg/kg	0.064	6649606	0.14	6661338	1.2	0.20	0.020	6655902
Benzo(k)fluoranthene	mg/kg	<0.020	6649606	0.046	6661338	0.42	0.065	0.020	6655902
Benzo(a)pyrene	mg/kg	0.045	6649606	0.097	6661338	0.89	0.15	0.020	6655902
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	6649606	0.065	6661338	0.46	0.084	0.050	6655902
Dibenz(a,h)anthracene	mg/kg	<0.050	6649606	<0.050	6661338	0.14	<0.050	0.050	6655902
Benzo(g,h,i)perylene	mg/kg	<0.050	6649606	0.071	6661338	0.47	0.11	0.050	6655902
Low Molecular Weight PAH`s	mg/kg	0.76	6634958	0.34	6634958	7.4	0.58	0.050	6634958
High Molecular Weight PAH`s	mg/kg	0.47	6634958	1.1	6634958	14	1.8	0.050	6634958
Total PAH	mg/kg	1.2	6634958	1.5	6634958	21	2.4	0.050	6634958
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	94	6649606	83	6661338	82	81		6655902
D8-ACENAPHTHYLENE (sur.)	%	91	6649606	59	6661338	83	82		6655902
D8-NAPHTHALENE (sur.)	%	95	6649606	83	6661338	89	85		6655902
TERPHENYL-D14 (sur.)	%	98	6649606	89	6661338	87	85		6655902

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2204	FV2205	FV2206	FV2207	FV2208	FV2209		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-141-130308**	**SP13-142-130308**	**SP13-143-130308**	**SP13-144-130308**	**SP13-145-130308**	**SP13-146-130308**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	2.6	1.7	1.3	1.7	1.4	7.4	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.22	0.14	0.11	0.15	0.12	0.56	0.10	6634957
Polycyclic Aromatics									
Naphthalene	mg/kg	0.035	0.021	0.017	0.028	0.022	0.17	0.010	6655902
2-Methylnaphthalene	mg/kg	0.042	0.025	<0.020	0.031	<0.020	0.13	0.020	6655902
Acenaphthylene	mg/kg	0.026	0.015	0.013	0.014	0.0075	0.017	0.0050	6655902
Acenaphthene	mg/kg	0.031	0.015	0.094	0.028	0.013	0.060	0.0050	6655902
Fluorene	mg/kg	0.038	<0.020	0.14	0.032	<0.020	0.070	0.020	6655902
Phenanthrene	mg/kg	0.22	0.12	0.52	0.19	0.12	0.91	0.020	6655902
Anthracene	mg/kg	0.051	0.022	0.061	0.046	0.022	0.16	0.0040	6655902
Fluoranthene	mg/kg	0.28	0.17	0.39	0.22	0.17	1.1	0.020	6655902
Pyrene	mg/kg	0.38	0.19	0.28	0.22	0.17	0.96	0.020	6655902
Benzo(a)anthracene	mg/kg	0.13	0.064	0.075	0.084	0.054	0.43	0.020	6655902
Chrysene	mg/kg	0.17	0.10	0.10	0.12	0.089	0.54	0.020	6655902
Benzo(b&j)fluoranthene	mg/kg	0.19	0.13	0.091	0.13	0.10	0.56	0.020	6655902
Benzo(k)fluoranthene	mg/kg	0.061	0.041	0.028	0.041	0.033	0.17	0.020	6655902
Benzo(a)pyrene	mg/kg	0.15	0.087	0.057	0.092	0.068	0.39	0.020	6655902
Indeno(1,2,3-cd)pyrene	mg/kg	0.082	0.053	<0.050	0.053	<0.050	0.20	0.050	6655902
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6655902
Benzo(g,h,i)perylene	mg/kg	0.10	0.069	<0.050	0.067	0.059	0.24	0.050	6655902
Low Molecular Weight PAH`s	mg/kg	0.44	0.22	0.85	0.37	0.18	1.5	0.050	6634958
High Molecular Weight PAH`s	mg/kg	1.7	0.98	1.1	1.1	0.80	5.0	0.050	6634958
Total PAH	mg/kg	2.1	1.2	1.9	1.5	0.99	6.5	0.050	6634958
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	83	86	88	83	87	84		6655902
D8-ACENAPHTHYLENE (sur.)	%	84	85	88	82	89	85		6655902
D8-NAPHTHALENE (sur.)	%	88	90	94	87	94	90		6655902
TERPHENYL-D14 (sur.)	%	88	90	94	87	92	89		6655902

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2210	FV2211	FV2212	FV2213		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-147-130308**	**SP13-148-130308**	**SP13-149-130308**	**SP13-150-130308**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	1.2	1.2	4.1	3.2	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.11	<0.10	0.33	0.25	0.10	6634957
Polycyclic Aromatics							
Naphthalene	mg/kg	0.015	0.013	0.035	0.098	0.010	6655902
2-Methylnaphthalene	mg/kg	<0.020	<0.020	0.040	0.067	0.020	6655902
Acenaphthylene	mg/kg	0.0078	0.010	0.037	0.025	0.0050	6655902
Acenaphthene	mg/kg	0.012	0.0055	0.047	0.12	0.0050	6655902
Fluorene	mg/kg	<0.020	<0.020	0.059	0.10	0.020	6655902
Phenanthrene	mg/kg	0.099	0.067	0.44	0.42	0.020	6655902
Anthracene	mg/kg	0.018	0.013	0.11	0.095	0.0040	6655902
Fluoranthene	mg/kg	0.13	0.12	0.53	0.51	0.020	6655902
Pyrene	mg/kg	0.13	0.11	0.49	0.45	0.020	6655902
Benzo(a)anthracene	mg/kg	0.047	0.046	0.22	0.18	0.020	6655902
Chrysene	mg/kg	0.075	0.071	0.26	0.25	0.020	6655902
Benzo(b&j)fluoranthene	mg/kg	0.086	0.086	0.30	0.23	0.020	6655902
Benzo(k)fluoranthene	mg/kg	0.027	0.027	0.11	0.073	0.020	6655902
Benzo(a)pyrene	mg/kg	0.060	0.055	0.22	0.17	0.020	6655902
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	0.12	0.085	0.050	6655902
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6655902
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	0.14	0.10	0.050	6655902
Low Molecular Weight PAH`s	mg/kg	0.15	0.11	0.77	0.92	0.050	6634958
High Molecular Weight PAH`s	mg/kg	0.61	0.57	2.6	2.2	0.050	6634958
Total PAH	mg/kg	0.76	0.68	3.3	3.1	0.050	6634958
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	95	91	84	87		6655902
D8-ACENAPHTHYLENE (sur.)	%	93	90	85	85		6655902
D8-NAPHTHALENE (sur.)	%	99	95	89	90		6655902
TERPHENYL-D14 (sur.)	%	100	95	88	90		6655902

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2214	FV2214			FV2215		
Sampling Date		2013/03/08	2013/03/08			2013/03/08		
	UNITS	**SP13-150-01-130308**	**SP13-150-01-130308 Lab-Dup**	**RDL**	**QC Batch**	**SP13-151-130308**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	40		0.10	6634957	3.1	0.10	6634957
Benzo[a]pyrene equivalency	N/A	3.2		0.10	6634957	0.25	0.10	6634957
Polycyclic Aromatics								
Naphthalene	mg/kg	0.14(1)	0.069(2)	0.010	6648180	0.041	0.010	6655902
2-Methylnaphthalene	mg/kg	0.16(1)	0.065	0.020	6648180	0.044	0.020	6655902
Acenaphthylene	mg/kg	0.17(1)	0.046(2)	0.0050	6648180	0.023	0.0050	6655902
Acenaphthene	mg/kg	0.73(1)	0.18(2)	0.0050	6648180	0.051	0.0050	6655902
Fluorene	mg/kg	0.91(1)	0.16(2)	0.020	6648180	0.052	0.020	6655902
Phenanthrene	mg/kg	6.2(1)	0.69(2)	0.020	6648180	0.32	0.020	6655902
Anthracene	mg/kg	2.6(1)	0.21(2)	0.0040	6648180	0.084	0.0040	6655902
Fluoranthene	mg/kg	7.1(1)	1.3(2)	0.020	6648180	0.37	0.020	6655902
Pyrene	mg/kg	6.5(1)	0.99(2)	0.020	6648180	0.36	0.020	6655902
Benzo(a)anthracene	mg/kg	2.7(1)	0.35(2)	0.020	6648180	0.16	0.020	6655902
Chrysene	mg/kg	2.6(1)	0.41(2)	0.020	6648180	0.20	0.020	6655902
Benzo(b&j)fluoranthene	mg/kg	2.6(1)	0.43(2)	0.020	6648180	0.23	0.020	6655902
Benzo(k)fluoranthene	mg/kg	1.0(1)	0.14(2)	0.020	6648180	0.074	0.020	6655902
Benzo(a)pyrene	mg/kg	2.1(1)	0.32(2)	0.020	6648180	0.17	0.020	6655902
Indeno(1,2,3-cd)pyrene	mg/kg	1.0(1)	0.20	0.050	6648180	0.087	0.050	6655902
Dibenz(a,h)anthracene	mg/kg	0.38(1)	0.059	0.050	6648180	<0.050	0.050	6655902
Benzo(g,h,i)perylene	mg/kg	1.1(1)	0.22	0.050	6648180	0.10	0.050	6655902
Low Molecular Weight PAH`s	mg/kg	11		0.020	6634958	0.61	0.050	6634958
High Molecular Weight PAH`s	mg/kg	29		0.050	6634958	1.9	0.050	6634958
Total PAH	mg/kg	40		0.050	6634958	2.5	0.050	6634958
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	100	101		6648180	90		6655902
D8-ACENAPHTHYLENE (sur.)	%	97	94		6648180	91		6655902
D8-NAPHTHALENE (sur.)	%	97	94		6648180	96		6655902
TERPHENYL-D14 (sur.)	%	103	102		6648180	94		6655902

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit - Reanalysis confirmed sample inhomogeneity - Increased variability of results
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV2216	FV2217	FV2217	FV2218		
Sampling Date		2013/03/08	2013/03/08	2013/03/08	2013/03/08		
	UNITS	**SP13-152-130308**	**SP13-153-130308**	**SP13-153-130308 Lab-Dup**	**SP13-154-130308**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	3.6	1.3		3.1	0.10	6634957
Benzo[a]pyrene equivalency	N/A	0.28	0.12		0.26	0.10	6634957
Polycyclic Aromatics							
Naphthalene	mg/kg	0.043	0.042	0.034	0.042	0.010	6655902
2-Methylnaphthalene	mg/kg	0.039	0.044	0.044	0.039	0.020	6655902
Acenaphthylene	mg/kg	0.038	0.012	0.020	0.023	0.0050	6655902
Acenaphthene	mg/kg	0.032	0.015	0.023	0.038	0.0050	6655902
Fluorene	mg/kg	0.035	<0.020	0.023	0.037	0.020	6655902
Phenanthrene	mg/kg	0.30	0.11	0.18	0.25	0.020	6655902
Anthracene	mg/kg	0.064	0.024	0.039	0.060	0.0040	6655902
Fluoranthene	mg/kg	0.44	0.14(1)	0.26(2)	0.39	0.020	6655902
Pyrene	mg/kg	0.40	0.14(1)	0.27(2)	0.41	0.020	6655902
Benzo(a)anthracene	mg/kg	0.18	0.058(1)	0.11	0.16	0.020	6655902
Chrysene	mg/kg	0.22	0.077(1)	0.15	0.20	0.020	6655902
Benzo(b&j)fluoranthene	mg/kg	0.27	0.092(1)	0.17	0.23	0.020	6655902
Benzo(k)fluoranthene	mg/kg	0.098	0.030	0.055	0.073	0.020	6655902
Benzo(a)pyrene	mg/kg	0.19	0.068(1)	0.13	0.17	0.020	6655902
Indeno(1,2,3-cd)pyrene	mg/kg	0.11	<0.050	0.072	0.10	0.050	6655902
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6655902
Benzo(g,h,i)perylene	mg/kg	0.12	<0.050	0.085	0.11	0.050	6655902
Low Molecular Weight PAH`s	mg/kg	0.55	0.24		0.49	0.050	6634958
High Molecular Weight PAH`s	mg/kg	2.2	0.66		2.0	0.050	6634958
Total PAH	mg/kg	2.7	0.90		2.5	0.050	6634958
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	84	52(2)	100	90		6655902
D8-ACENAPHTHYLENE (sur.)	%	82	50	99	90		6655902
D8-NAPHTHALENE (sur.)	%	88	52	103	94		6655902
TERPHENYL-D14 (sur.)	%	88	54(2)	103	94		6655902

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate exceeds acceptance criteria due to sample non homogeneity.
(2) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PAH IN LEACHATE BY GC-MS (SOIL)

Maxxam ID		FV2214		
Sampling Date		2013/03/08		
	UNITS	**SP13-150-01-130308**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Leachate Low Molecular Weight PAH`s	ug/L	<0.50	0.50	6674474
Leachate High Molecular Weight PAH`s	ug/L	<0.20	0.20	6674474
Leachate Total PAH	ug/L	<0.50	0.50	6674474
Leachate Benzo(a)pyrene	ug/L	<0.10	0.10	6680316
Surrogate Recovery (%)				
Leachate D10-ANTHRACENE (sur.)	%	87		6680316
Leachate D8-ACENAPHTHYLENE (sur.)	%	85		6680316
Leachate D8-NAPHTHALENE (sur.)	%	89		6680316
Leachate TERPHENYL-D14 (sur.)	%	90		6680316

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV2197			FV2198		FV2199		FV2200		
Sampling Date		2013/03/08			2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-135-130308**	**RDL**	**QC Batch**	**SP13-136-130308**	**RDL**	**SP13-137-130308**	**RDL**	**SP13-138-130308**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	55	10	6669371	116	10	93	10	50	10	6665884
Soluble Chloride (Cl)	mg/L	105	5.0	6669301	126	5.0	120	5.0	171	5.0	6665883
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	48.0	2.3	6634960	47.6	1.9	55.3	2.3	74.9	2.2	6634960
Soluble Sodium (Na)	mg/kg	15.3	2.3	6634960	18.9	1.9	26.9	2.3	26.6	2.2	6634960
Soluble Parameters											
Soluble Conductivity	uS/cm	554	1.0	6661574	761	1.0	753	1.0	810	1.0	6661574
Soluble pH	pH Units	6.98	N/A	6661572	7.19	N/A	7.28	N/A	6.80	N/A	6661572
Wet Soluble Calcium (Ca)	mg/L	65.3	5.0	6665360	91.9	5.0	87.1	5.0	78.9	5.0	6665360
Saturation %	%	45.7	1.0	6661571	37.9	1.0	46.2	1.0	43.9	1.0	6661571
Wet Soluble Magnesium (Mg)	mg/L	10.0	5.0	6665360	16.9	5.0	17.2	5.0	18.1	5.0	6665360
Wet Soluble Potassium (K)	mg/L	<20	20	6665360	<20	20	<20	20	<20	20	6665360
Wet Soluble Sodium (Na)	mg/L	33.4	5.0	6665360	49.7	5.0	58.2	5.0	60.7	5.0	6665360
Wet Soluble Sulphur (S)	mg/L	<30	30	6665360	46	30	44	30	<30	30	6665360
Sodium Adsorption Ratio	N/A	1.02	0.10	6634959	1.25	0.10	1.49	0.10	1.60	0.10	6634959

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV2201		FV2202		FV2203	FV2204		FV2205		
Sampling Date		2013/03/08		2013/03/08		2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-139-130308**	**RDL**	**SP13-140-130308**	**RDL**	**SP13-140-01-130308**	**SP13-141-130308**	**RDL**	**SP13-142-130308**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	115	10	89	10	95	115	10	96	10	6665884
Soluble Chloride (Cl)	mg/L	137	5.0	115	5.0	128	98.7	5.0	105	5.0	6665883
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	60.6	2.2	46.9	2.0	53.5	40.8	2.1	46.0	2.2	6634960
Soluble Sodium (Na)	mg/kg	32.6	2.2	24.2	2.0	26.2	23.0	2.1	33.3	2.2	6634960
Soluble Parameters											
Soluble Conductivity	uS/cm	811	1.0	682	1.0	734	693	1.0	698	1.0	6661574
Soluble pH	pH Units	7.19	N/A	7.19	N/A	7.26	7.32	N/A	7.19	N/A	6661572
Wet Soluble Calcium (Ca)	mg/L	84.5	5.0	70.4	5.0	79.1	78.3	5.0	66.0	5.0	6665360
Saturation %	%	44.3	1.0	40.9	1.0	41.8	41.3	1.0	43.7	1.0	6661571
Wet Soluble Magnesium (Mg)	mg/L	15.9	5.0	14.3	5.0	16.1	14.9	5.0	15.1	5.0	6665360
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	20	<20	20	6665360
Wet Soluble Sodium (Na)	mg/L	73.5	5.0	59.2	5.0	62.6	55.5	5.0	76.1	5.0	6665360
Wet Soluble Sulphur (S)	mg/L	47	30	40	30	41	48	30	47	30	6665360
Sodium Adsorption Ratio	N/A	1.93	0.10	1.68	0.10	1.68	1.51	0.10	2.20	0.10	6634959

N/A = Not Applicable
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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV2206		FV2207	FV2208		FV2209		FV2210		
Sampling Date		2013/03/08		2013/03/08	2013/03/08		2013/03/08		2013/03/08		
	UNITS	**SP13-143-130308**	**RDL**	**SP13-144-130308**	**SP13-145-130308**	**RDL**	**SP13-146-130308**	**RDL**	**SP13-147-130308**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	104	10	127	114	10	97	10	90	10	6665884
Soluble Chloride (Cl)	mg/L	62.0	5.0	85.7	54.9	5.0	42.7	5.0	42.9	5.0	6665883
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	30.2	2.4	34.4	22.1	2.0	18.3	2.1	19.4	2.3	6634960
Soluble Sodium (Na)	mg/kg	23.1	2.4	24.2	17.2	2.0	16.6	2.1	17.5	2.3	6634960
Soluble Parameters											
Soluble Conductivity	uS/cm	609	1.0	686	574	1.0	506	1.0	486	1.0	6661574
Soluble pH	pH Units	7.08	N/A	7.16	7.15	N/A	7.07	N/A	7.10	N/A	6661572
Wet Soluble Calcium (Ca)	mg/L	77.2	5.0	80.6	71.1	5.0	55.1	5.0	51.1	5.0	6665360
Saturation %	%	48.7	1.0	40.2	40.3	1.0	42.9	1.0	45.3	1.0	6661571
Wet Soluble Magnesium (Mg)	mg/L	14.8	5.0	14.1	13.8	5.0	17.1	5.0	17.3	5.0	6665360
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	20	<20	20	<20	20	6665360
Wet Soluble Sodium (Na)	mg/L	47.4	5.0	60.2	42.7	5.0	38.7	5.0	38.6	5.0	6665360
Wet Soluble Sulphur (S)	mg/L	42	30	52	45	30	36	30	33	30	6665360
Sodium Adsorption Ratio	N/A	1.30	0.10	1.63	1.22	0.10	1.17	0.10	1.19	0.10	6634959

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
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Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV2210		FV2211		FV2212	FV2213		FV2214		
Sampling Date		2013/03/08		2013/03/08		2013/03/08	2013/03/08		2013/03/08		
	UNITS	**SP13-147-130308 Lab-Dup**	**RDL**	**SP13-148-130308**	**RDL**	**SP13-149-130308**	**SP13-150-130308**	**RDL**	**SP13-150-01-130308**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	90	10	91	10	63	75	10	80	10	6665884
Soluble Chloride (Cl)	mg/L	42.2	5.0	31.8	5.0	61.6	83.6	5.0	82.5	5.0	6665883
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg		2.3	13.9	2.2	26.1	35.0	2.1	33.2	2.0	6634960
Soluble Sodium (Na)	mg/kg		2.3	13.7	2.2	12.9	21.3	2.1	19.6	2.0	6634960
Soluble Parameters											
Soluble Conductivity	uS/cm	470	1.0	436	1.0	505	612	1.0	576	1.0	6661574
Soluble pH	pH Units	7.11	N/A	7.11	N/A	7.23	7.46	N/A	7.40	N/A	6661572
Wet Soluble Calcium (Ca)	mg/L	50.3	5.0	62.1	5.0	64.7	64.1	5.0	57.6	5.0	6665360
Saturation %	%	45.2	1.0	43.7	1.0	42.3	41.8	1.0	40.2	1.0	6661571
Wet Soluble Magnesium (Mg)	mg/L	17.3	5.0	17.6	5.0	17.2	19.7	5.0	21.7	5.0	6665360
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	<20	20	<20	20	6665360
Wet Soluble Sodium (Na)	mg/L	36.8	5.0	31.3	5.0	30.4	50.9	5.0	48.6	5.0	6665360
Wet Soluble Sulphur (S)	mg/L	34	30	31	30	31	46	30	45	30	6665360
Sodium Adsorption Ratio	N/A		0.10	0.90	0.10	0.87	1.43	0.10	1.39	0.10	6634959

N/A = Not Applicable
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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV2215			FV2216			FV2217		FV2218		
Sampling Date		2013/03/08			2013/03/08			2013/03/08		2013/03/08		
	UNITS	**SP13-151-130308**	**RDL**	**QC Batch**	**SP13-152-130308**	**RDL**	**QC Batch**	**SP13-153-130308**	**RDL**	**SP13-154-130308**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	65	10	6665884	98	10	6669371	52	10	53	10	6665887
Soluble Chloride (Cl)	mg/L	52.6	5.0	6665883	81.3	5.0	6669301	73.1	5.0	51.4	5.0	6665885
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	24.6	2.3	6634960	32.1	2.0	6634960	32.2	2.2	23.9	2.3	6634960
Soluble Sodium (Na)	mg/kg	13.7	2.3	6634960	21.4	2.0	6634960	20.8	2.2	14.0	2.3	6634960
Soluble Parameters												
Soluble Conductivity	uS/cm	478	1.0	6661574	606	1.0	6661581	533	1.0	523	1.0	6661581
Soluble pH	pH Units	7.14	N/A	6661572	7.44	N/A	6661579	7.26	N/A	7.17	N/A	6661579
Wet Soluble Calcium (Ca)	mg/L	63.6	5.0	6665360	65.1	5.0	6665485	60.1	5.0	74.1	5.0	6665485
Saturation %	%	46.8	1.0	6661571	39.5	1.0	6661575	44.0	1.0	46.4	1.0	6661575
Wet Soluble Magnesium (Mg)	mg/L	16.1	5.0	6665360	21.0	5.0	6665485	17.3	5.0	17.0	5.0	6665485
Wet Soluble Potassium (K)	mg/L	<20	20	6665360	<20	20	6665485	<20	20	<20	20	6665485
Wet Soluble Sodium (Na)	mg/L	29.1	5.0	6665360	54.3	5.0	6665485	47.2	5.0	30.2	5.0	6665485
Wet Soluble Sulphur (S)	mg/L	<30	30	6665360	47	30	6665485	32	30	<30	30	6665485
Sodium Adsorption Ratio	N/A	0.85	0.10	6634959	1.50	0.10	6634959	1.38	0.10	0.82	0.10	6634959

N/A = Not Applicable
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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Package 1	3.7°C
Package 2	3.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

REVISED REPORT - additional analysis has been completed as per clients' emailed request. KD4 - March 22/13

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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6635246	Moisture	2013/03/12					<0.30	%	2.3	20		
6635251	Moisture	2013/03/13					<0.30	%	5.4	20		
6640022	Moisture	2013/03/13					<0.30	%	10.8	20		
6640023	Moisture	2013/03/13					<0.30	%	6.0	20		
6641147	Total Antimony (Sb)	2013/03/13	95	75 - 125	102	75 - 125	<0.10	mg/kg	NC	30	86	70 - 130
6641147	Total Arsenic (As)	2013/03/13	99	75 - 125	100	75 - 125	0.50, RDL=0.50	mg/kg	2.3	30	96	70 - 130
6641147	Total Barium (Ba)	2013/03/13	NC	75 - 125	104	75 - 125	<0.10	mg/kg	0.09	35	101	70 - 130
6641147	Total Beryllium (Be)	2013/03/13	103	75 - 125	100	75 - 125	<0.40	mg/kg	NC	30		
6641147	Total Cadmium (Cd)	2013/03/13	108	75 - 125	107	75 - 125	<0.050	mg/kg	NC	30	98	70 - 130
6641147	Total Chromium (Cr)	2013/03/13	97	75 - 125	104	75 - 125	<1.0	mg/kg	0.2	30	94	70 - 130
6641147	Total Cobalt (Co)	2013/03/13	99	75 - 125	106	75 - 125	<0.30	mg/kg	0.04	30	89	70 - 130
6641147	Total Copper (Cu)	2013/03/13	98	75 - 125	104	75 - 125	<0.50	mg/kg	1.2	30	86	70 - 130
6641147	Total Lead (Pb)	2013/03/13	101	75 - 125	104	75 - 125	<0.10	mg/kg	4.2	35	97	70 - 130
6641147	Total Lithium (Li)	2013/03/13	100	75 - 125	103	75 - 125	<5.0	mg/kg	NC	30		
6641147	Total Manganese (Mn)	2013/03/13	NC	75 - 125	106	75 - 125	<0.20	mg/kg	0.8	30	99	70 - 130
6641147	Total Mercury (Hg)	2013/03/13	104	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35	87	70 - 130
6641147	Total Molybdenum (Mo)	2013/03/13	102	75 - 125	104	75 - 125	<0.10	mg/kg	10.4	35	103	70 - 130
6641147	Total Nickel (Ni)	2013/03/13	97	75 - 125	103	75 - 125	<0.80	mg/kg	0.5	30	86	70 - 130
6641147	Total Selenium (Se)	2013/03/13	111	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30		
6641147	Total Silver (Ag)	2013/03/13	99	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35		
6641147	Total Strontium (Sr)	2013/03/13	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.8	35	103	70 - 130
6641147	Total Thallium (Tl)	2013/03/13	99	75 - 125	105	75 - 125	<0.050	mg/kg	NC	30	85	70 - 130
6641147	Total Tin (Sn)	2013/03/13	99	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
6641147	Total Titanium (Ti)	2013/03/13	NC	75 - 125	104	75 - 125	<1.0	mg/kg	0.1	35	101	70 - 130
6641147	Total Uranium (U)	2013/03/13	99	75 - 125	102	75 - 125	<0.050	mg/kg	2.8	30	91	70 - 130
6641147	Total Vanadium (V)	2013/03/13	NC	75 - 125	103	75 - 125	<2.0	mg/kg	1	30	103	70 - 130
6641147	Total Zinc (Zn)	2013/03/13	NC	75 - 125	107	75 - 125	<1.0	mg/kg	0.5	30	92	70 - 130
6641147	Total Aluminum (Al)	2013/03/13					<100	mg/kg	1.1	35	102	70 - 130
6641147	Total Calcium (Ca)	2013/03/13					<100	mg/kg	5.4	30	92	70 - 130
6641147	Total Iron (Fe)	2013/03/13					<100	mg/kg	1	30	92	70 - 130
6641147	Total Magnesium (Mg)	2013/03/13					<100	mg/kg	1.7	30	92	70 - 130
6641147	Total Phosphorus (P)	2013/03/13					<10	mg/kg	2.2	30	93	70 - 130
6641147	Total Bismuth (Bi)	2013/03/13					<0.10	mg/kg	NC	30		
6641147	Total Potassium (K)	2013/03/13					<100	mg/kg	NC	35		
6641147	Total Sodium (Na)	2013/03/13					<100	mg/kg	NC	35		
6641147	Total Zirconium (Zr)	2013/03/13					<0.50	mg/kg	3.3	30		
6641193	Soluble (2:1) pH	2013/03/14			102	96 - 104			0.5	20		
6641195	Total Antimony (Sb)	2013/03/13	99	75 - 125	103	75 - 125	<0.10	mg/kg	NC	30	94	70 - 130
6641195	Total Arsenic (As)	2013/03/13	101	75 - 125	102	75 - 125	0.84, RDL=0.50	mg/kg	2.2	30	98	70 - 130

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6641195	Total Barium (Ba)	2013/03/13	NC	75 - 125	107	75 - 125	<0.10	mg/kg	0.7	35	104	70 - 130
6641195	Total Beryllium (Be)	2013/03/13	115	75 - 125	104	75 - 125	<0.40	mg/kg	NC	30		
6641195	Total Cadmium (Cd)	2013/03/13	105	75 - 125	109	75 - 125	<0.050	mg/kg	NC	30	98	70 - 130
6641195	Total Chromium (Cr)	2013/03/13	103	75 - 125	108	75 - 125	<1.0	mg/kg	5.1	30	100	70 - 130
6641195	Total Cobalt (Co)	2013/03/13	102	75 - 125	109	75 - 125	<0.30	mg/kg	4.8	30	98	70 - 130
6641195	Total Copper (Cu)	2013/03/13	101	75 - 125	109	75 - 125	<0.50	mg/kg	1	30	88	70 - 130
6641195	Total Lead (Pb)	2013/03/13	100	75 - 125	108	75 - 125	<0.10	mg/kg	0.5	35	100	70 - 130
6641195	Total Lithium (Li)	2013/03/13	105	75 - 125	103	75 - 125	<5.0	mg/kg				
6641195	Total Manganese (Mn)	2013/03/13	NC	75 - 125	109	75 - 125	<0.20	mg/kg	3.5	30	103	70 - 130
6641195	Total Mercury (Hg)	2013/03/13	102	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35	79	70 - 130
6641195	Total Molybdenum (Mo)	2013/03/13	108	75 - 125	103	75 - 125	<0.10	mg/kg	NC	35	101	70 - 130
6641195	Total Nickel (Ni)	2013/03/13	102	75 - 125	108	75 - 125	<0.80	mg/kg	3.8	30	92	70 - 130
6641195	Total Selenium (Se)	2013/03/13	111	75 - 125	104	75 - 125	<0.50	mg/kg	NC	30		
6641195	Total Silver (Ag)	2013/03/13	101	75 - 125	99	75 - 125	<0.050	mg/kg	NC	35		
6641195	Total Strontium (Sr)	2013/03/13	NC	75 - 125	102	75 - 125	<0.10	mg/kg	1.9	35	104	70 - 130
6641195	Total Thallium (Tl)	2013/03/13	98	75 - 125	103	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6641195	Total Tin (Sn)	2013/03/13	99	75 - 125	103	75 - 125	<0.10	mg/kg	NC	35		
6641195	Total Titanium (Ti)	2013/03/13	NC	75 - 125	106	75 - 125	<1.0	mg/kg	1.8	35	109	70 - 130
6641195	Total Uranium (U)	2013/03/13	106	75 - 125	107	75 - 125	<0.050	mg/kg			90	70 - 130
6641195	Total Vanadium (V)	2013/03/13	100	75 - 125	104	75 - 125	<2.0	mg/kg	4.1	30	106	70 - 130
6641195	Total Zinc (Zn)	2013/03/13	NC	75 - 125	106	75 - 125	<1.0	mg/kg	1.3	30	95	70 - 130
6641195	Total Aluminum (Al)	2013/03/13					<100	mg/kg	1.4	35	105	70 - 130
6641195	Total Calcium (Ca)	2013/03/13					<100	mg/kg	2.8	30	102	70 - 130
6641195	Total Iron (Fe)	2013/03/13					<100	mg/kg	3.1	30	99	70 - 130
6641195	Total Magnesium (Mg)	2013/03/13					<100	mg/kg	3.0	30	98	70 - 130
6641195	Total Phosphorus (P)	2013/03/13					<10	mg/kg	2.9	30	97	70 - 130
6641195	Total Bismuth (Bi)	2013/03/13					<0.10	mg/kg	NC	30		
6641195	Total Potassium (K)	2013/03/13					<100	mg/kg	3.3	35		
6641195	Total Sodium (Na)	2013/03/13					<100	mg/kg	NC	35		
6641195	Total Zirconium (Zr)	2013/03/13					<0.50	mg/kg	NC	30		
6641196	Soluble (2:1) pH	2013/03/14			102	96 - 104			0.5	20		
6643812	D10-ANTHRACENE (sur.)	2013/03/13	105	60 - 130	111	60 - 130	117	%				
6643812	D8-ACENAPHTHYLENE (sur.)	2013/03/13	95	50 - 130	103	50 - 130	109	%				
6643812	D8-NAPHTHALENE (sur.)	2013/03/13	95	50 - 130	102	50 - 130	109	%				
6643812	TERPHENYL-D14 (sur.)	2013/03/13	103	60 - 130	110	60 - 130	116	%				
6643812	Naphthalene	2013/03/13	85	50 - 130	90	50 - 130	<0.010	mg/kg	NC(1)	50		
6643812	2-Methylnaphthalene	2013/03/13	87	50 - 130	91	50 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Acenaphthylene	2013/03/13	88	50 - 130	95	50 - 130	<0.0050	mg/kg	NC(1)	50		
6643812	Acenaphthene	2013/03/13	96	50 - 130	98	50 - 130	<0.0050	mg/kg	NC(1)	50		

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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6643812	Fluorene	2013/03/13	92	50 - 130	97	50 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Phenanthrene	2013/03/13	92	60 - 130	96	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Anthracene	2013/03/13	96	60 - 130	106	60 - 130	<0.0040	mg/kg	NC(1)	50		
6643812	Fluoranthene	2013/03/13	97	60 - 130	100	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Pyrene	2013/03/13	96	60 - 130	99	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Benzo(a)anthracene	2013/03/13	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Chrysene	2013/03/13	88	60 - 130	95	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Benzo(b&j)fluoranthene	2013/03/13	82	60 - 130	91	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Benzo(k)fluoranthene	2013/03/13	94	60 - 130	92	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Benzo(a)pyrene	2013/03/13	94	60 - 130	99	60 - 130	<0.020	mg/kg	NC(1)	50		
6643812	Indeno(1,2,3-cd)pyrene	2013/03/13	87	60 - 130	97	60 - 130	<0.050	mg/kg	NC(1)	50		
6643812	Dibenz(a,h)anthracene	2013/03/13	87	60 - 130	96	60 - 130	<0.050	mg/kg	NC(1)	50		
6643812	Benzo(g,h,i)perylene	2013/03/13	82	60 - 130	89	60 - 130	<0.050	mg/kg	NC(1)	50		
6643927	O-TERPHENYL (sur.)	2013/03/13	117	50 - 130	105	50 - 130	109	%				
6643927	F2 (C10-C16 Hydrocarbons)	2013/03/13	105	50 - 130	93	80 - 120	<10	mg/kg	16.6	40		
6643927	F3 (C16-C34 Hydrocarbons)	2013/03/13	NC	50 - 130	97	80 - 120	<10	mg/kg	16.7	40		
6643927	F4 (C34-C50 Hydrocarbons)	2013/03/13	113	50 - 130	96	80 - 120	<10	mg/kg	32.3	40		
6643927	Reached Baseline at C50	2013/03/13					YES, RDL=N/A	mg/kg	NC	50		
6645311	1,4-Difluorobenzene (sur.)	2013/03/13	99	70 - 130	103	70 - 130	102	%				
6645311	4-BROMOFLUOROBENZENE (sur.)	2013/03/13	100	70 - 130	100	70 - 130	96	%				
6645311	D10-ETHYLBENZENE (sur.)	2013/03/13	97	50 - 130	89	50 - 130	94	%				
6645311	D4-1,2-DICHLOROETHANE (sur.)	2013/03/13	100	70 - 130	94	70 - 130	95	%				
6645311	Benzene	2013/03/13	90	60 - 140	97	60 - 140	<0.0050	mg/kg	NC	40		
6645311	Toluene	2013/03/13	107	60 - 140	95	60 - 140	<0.020	mg/kg	NC	40		
6645311	Ethylbenzene	2013/03/13	103	60 - 140	106	60 - 140	<0.010	mg/kg	NC	40		
6645311	m & p-Xylene	2013/03/13	100	60 - 140	108	60 - 140	<0.040	mg/kg	NC	40		
6645311	o-Xylene	2013/03/13	103	60 - 140	111	60 - 140	<0.040	mg/kg	NC	40		
6645311	VH C6-C10	2013/03/13			74	60 - 140	<10	mg/kg	NC	40		
6645311	(C6-C10)	2013/03/13			81	60 - 140	<10	mg/kg				
6645311	Methyl-tert-butylether(MTBE)	2013/03/13					<0.10	mg/kg	NC	40		
6645311	Styrene	2013/03/13					<0.030	mg/kg	NC	40		
6645311	Xylenes (Total)	2013/03/13					<0.040	mg/kg	NC	40		
6646887	1,4-Difluorobenzene (sur.)	2013/03/13	115	70 - 130	99	70 - 130	96	%				
6646887	4-BROMOFLUOROBENZENE (sur.)	2013/03/13	99	70 - 130	97	70 - 130	100	%				
6646887	D10-ETHYLBENZENE (sur.)	2013/03/13	104	50 - 130	96	50 - 130	101	%				
6646887	D4-1,2-DICHLOROETHANE (sur.)	2013/03/13	105	70 - 130	105	70 - 130	102	%				
6646887	Benzene	2013/03/13	102	60 - 140	89	60 - 140	<0.0050	mg/kg	NC(2)	40		
6646887	Toluene	2013/03/13	121	60 - 140	105	60 - 140	<0.020	mg/kg	NC(2)	40		
6646887	Ethylbenzene	2013/03/13	116	60 - 140	100	60 - 140	<0.010	mg/kg	NC(2)	40		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6646887	m & p-Xylene	2013/03/13	112	60 - 140	96	60 - 140	<0.040	mg/kg	NC(2)	40		
6646887	o-Xylene	2013/03/13	114	60 - 140	99	60 - 140	<0.040	mg/kg	NC(2)	40		
6646887	VH C6-C10	2013/03/13			101	60 - 140	<10	mg/kg	NC(2)	40		
6646887	(C6-C10)	2013/03/13			103	60 - 140	<10	mg/kg				
6646887	Methyl-tert-butylether(MTBE)	2013/03/13					<0.10	mg/kg	NC(2)	40		
6646887	Styrene	2013/03/13					<0.030	mg/kg	NC(2)	40		
6646887	Xylenes (Total)	2013/03/13					<0.040	mg/kg	NC	40		
6647330	1,4-Difluorobenzene (sur.)	2013/03/14	106	70 - 130	92	70 - 130	98	%				
6647330	4-BROMOFLUOROBENZENE (sur.)	2013/03/14	103	70 - 130	106	70 - 130	98	%				
6647330	D10-ETHYLBENZENE (sur.)	2013/03/14	105	50 - 130	96	50 - 130	104	%				
6647330	D4-1,2-DICHLOROETHANE (sur.)	2013/03/14	104	70 - 130	103	70 - 130	108	%				
6647330	Benzene	2013/03/14	95	60 - 140	91	60 - 140	<0.0050	mg/kg	NC(2)	40		
6647330	Toluene	2013/03/14	113	60 - 140	109	60 - 140	<0.020	mg/kg	NC(2)	40		
6647330	Ethylbenzene	2013/03/14	110	60 - 140	107	60 - 140	<0.010	mg/kg	NC(2)	40		
6647330	m & p-Xylene	2013/03/14	106	60 - 140	103	60 - 140	<0.040	mg/kg	NC(2)	40		
6647330	o-Xylene	2013/03/14	110	60 - 140	107	60 - 140	<0.040	mg/kg	NC(2)	40		
6647330	VH C6-C10	2013/03/14			96	60 - 140	<10	mg/kg	NC(2)	40		
6647330	(C6-C10)	2013/03/14			102	60 - 140	<10	mg/kg				
6647330	Methyl-tert-butylether(MTBE)	2013/03/14					<0.10	mg/kg	NC(2)	40		
6647330	Styrene	2013/03/14					<0.030	mg/kg	NC(2)	40		
6647330	Xylenes (Total)	2013/03/14					<0.040	mg/kg	NC	40		
6648180	D10-ANTHRACENE (sur.)	2013/03/14	98	60 - 130	115	60 - 130	101	%				
6648180	D8-ACENAPHTHYLENE (sur.)	2013/03/14	92	50 - 130	104	50 - 130	92	%				
6648180	D8-NAPHTHALENE (sur.)	2013/03/14	91	50 - 130	103	50 - 130	91	%				
6648180	TERPHENYL-D14 (sur.)	2013/03/14	100	60 - 130	117	60 - 130	103	%				
6648180	Naphthalene	2013/03/14	87	50 - 130	98	50 - 130	<0.010	mg/kg	67.4(3)	50		
6648180	2-Methylnaphthalene	2013/03/14	88	50 - 130	99	50 - 130	<0.020	mg/kg	NC	50		
6648180	Acenaphthylene	2013/03/14	87	50 - 130	103	50 - 130	<0.0050	mg/kg	116(3)	50		
6648180	Acenaphthene	2013/03/14	70	50 - 130	108	50 - 130	<0.0050	mg/kg	123(3)	50		
6648180	Fluorene	2013/03/14	73	50 - 130	107	50 - 130	<0.020	mg/kg	142(3)	50		
6648180	Phenanthrene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	160(3)	50		
6648180	Anthracene	2013/03/14	NC	60 - 130	118	60 - 130	<0.0040	mg/kg	170(3)	50		
6648180	Fluoranthene	2013/03/14	NC	60 - 130	115	60 - 130	<0.020	mg/kg	140(3)	50		
6648180	Pyrene	2013/03/14	NC	60 - 130	112	60 - 130	<0.020	mg/kg	147(3)	50		
6648180	Benzo(a)anthracene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	154(3)	50		
6648180	Chrysene	2013/03/14	NC	60 - 130	109	60 - 130	<0.020	mg/kg	145(3)	50		
6648180	Benzo(b&j)fluoranthene	2013/03/14	NC	60 - 130	108	60 - 130	<0.020	mg/kg	143(3)	50		
6648180	Benzo(k)fluoranthene	2013/03/14	NC	60 - 130	106	60 - 130	<0.020	mg/kg	151(3)	50		
6648180	Benzo(a)pyrene	2013/03/14	NC	60 - 130	110	60 - 130	<0.020	mg/kg	146(3)	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6648180	Indeno(1,2,3-cd)pyrene	2013/03/14	NC	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6648180	Dibenz(a,h)anthracene	2013/03/14	92	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6648180	Benzo(g,h,i)perylene	2013/03/14	NC	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6649606	D10-ANTHRACENE (sur.)	2013/03/14	86	60 - 130	92	60 - 130	87	%				
6649606	D8-ACENAPHTHYLENE (sur.)	2013/03/14	81	50 - 130	88	50 - 130	84	%				
6649606	D8-NAPHTHALENE (sur.)	2013/03/14	85	50 - 130	90	50 - 130	85	%				
6649606	TERPHENYL-D14 (sur.)	2013/03/14	89	60 - 130	94	60 - 130	89	%				
6649606	Naphthalene	2013/03/14	83	50 - 130	87	50 - 130	<0.010	mg/kg	NC	50		
6649606	2-Methylnaphthalene	2013/03/14	84	50 - 130	86	50 - 130	<0.020	mg/kg	NC	50		
6649606	Acenaphthylene	2013/03/14	82	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
6649606	Acenaphthene	2013/03/14	87	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
6649606	Fluorene	2013/03/14	88	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6649606	Phenanthrene	2013/03/14	83	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
6649606	Anthracene	2013/03/14	88	60 - 130	93	60 - 130	<0.0040	mg/kg	NC	50		
6649606	Fluoranthene	2013/03/14	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6649606	Pyrene	2013/03/14	84	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(a)anthracene	2013/03/14	85	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6649606	Chrysene	2013/03/14	84	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(b&j)fluoranthene	2013/03/14	82	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(k)fluoranthene	2013/03/14	79	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
6649606	Benzo(a)pyrene	2013/03/14	86	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6649606	Indeno(1,2,3-cd)pyrene	2013/03/14	83	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
6649606	Dibenz(a,h)anthracene	2013/03/14	82	60 - 130	87	60 - 130	<0.050	mg/kg	NC	50		
6649606	Benzo(g,h,i)perylene	2013/03/14	77	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6650983	O-TERPHENYL (sur.)	2013/03/14	98	50 - 130	94	50 - 130	107	%				
6650983	EPH (C10-C19)	2013/03/14	90	50 - 130	96	50 - 130	<100	mg/kg	NC	40		
6650983	EPH (C19-C32)	2013/03/14	NC	50 - 130	91	50 - 130	<100	mg/kg	NC	40		
6655902	D10-ANTHRACENE (sur.)	2013/03/16	87	60 - 130	93	60 - 130	89	%				
6655902	D8-ACENAPHTHYLENE (sur.)	2013/03/16	88	50 - 130	92	50 - 130	89	%				
6655902	D8-NAPHTHALENE (sur.)	2013/03/16	92	50 - 130	96	50 - 130	92	%				
6655902	TERPHENYL-D14 (sur.)	2013/03/16	91	60 - 130	95	60 - 130	92	%				
6655902	Naphthalene	2013/03/16	96	50 - 130	90	50 - 130	<0.010	mg/kg	NC	50		
6655902	2-Methylnaphthalene	2013/03/16	91	50 - 130	88	50 - 130	<0.020	mg/kg	NC	50		
6655902	Acenaphthylene	2013/03/16	96	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
6655902	Acenaphthene	2013/03/16	97	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
6655902	Fluorene	2013/03/16	98	50 - 130	89	50 - 130	<0.020	mg/kg	NC	50		
6655902	Phenanthrene	2013/03/16	97	60 - 130	89	60 - 130	<0.020	mg/kg	49.0	50		
6655902	Anthracene	2013/03/16	95	60 - 130	89	60 - 130	<0.0040	mg/kg	46.0	50		
6655902	Fluoranthene	2013/03/16	100	60 - 130	89	60 - 130	<0.020	mg/kg	58.3(3)	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6655902	Pyrene	2013/03/16	97	60 - 130	86	60 - 130	<0.020	mg/kg	64.8(3)	50		
6655902	Benzo(a)anthracene	2013/03/16	94	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6655902	Chrysene	2013/03/16	96	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6655902	Benzo(b&j)fluoranthene	2013/03/16	95	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
6655902	Benzo(k)fluoranthene	2013/03/16	91	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
6655902	Benzo(a)pyrene	2013/03/16	100	60 - 130	92	60 - 130	<0.020	mg/kg	NC	50		
6655902	Indeno(1,2,3-cd)pyrene	2013/03/16	91	60 - 130	83	60 - 130	<0.050	mg/kg	NC	50		
6655902	Dibenz(a,h)anthracene	2013/03/16	90	60 - 130	81	60 - 130	<0.050	mg/kg	NC	50		
6655902	Benzo(g,h,i)perylene	2013/03/16	85	60 - 130	78	60 - 130	<0.050	mg/kg	NC	50		
6656160	O-TERPHENYL (sur.)	2013/03/18	88	50 - 130	108	50 - 130	110	%				
6656160	F2 (C10-C16 Hydrocarbons)	2013/03/18	NC	50 - 130	99	80 - 120	<10	mg/kg	1.6	40		
6656160	F3 (C16-C34 Hydrocarbons)	2013/03/18	NC	50 - 130	103	80 - 120	<10	mg/kg	3.7	40		
6656160	F4 (C34-C50 Hydrocarbons)	2013/03/18	99	50 - 130	101	80 - 120	11, RDL=10	mg/kg	9.4	40		
6656160	Reached Baseline at C50	2013/03/18							NC	50		
6657574	O-TERPHENYL (sur.)	2013/03/18	93	50 - 130	97	50 - 130	103	%				
6657574	EPH (C10-C19)	2013/03/18	100	50 - 130	101	50 - 130	<100	mg/kg	NC	40		
6657574	EPH (C19-C32)	2013/03/18	88	50 - 130	90	50 - 130	<100	mg/kg	NC	40		
6661338	D10-ANTHRACENE (sur.)	2013/03/18	92	60 - 130	97	60 - 130	84	%				
6661338	D8-ACENAPHTHYLENE (sur.)	2013/03/18	91	50 - 130	93	50 - 130	82	%				
6661338	D8-NAPHTHALENE (sur.)	2013/03/18	91	50 - 130	94	50 - 130	83	%				
6661338	TERPHENYL-D14 (sur.)	2013/03/18	97	60 - 130	99	60 - 130	85	%				
6661338	Naphthalene	2013/03/18	88	50 - 130	87	50 - 130	<0.010	mg/kg	NC	50		
6661338	2-Methylnaphthalene	2013/03/18	87	50 - 130	84	50 - 130	<0.020	mg/kg	NC	50		
6661338	Acenaphthylene	2013/03/18	90	50 - 130	89	50 - 130	<0.0050	mg/kg	NC	50		
6661338	Acenaphthene	2013/03/18	92	50 - 130	89	50 - 130	<0.0050	mg/kg	NC	50		
6661338	Fluorene	2013/03/18	93	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6661338	Phenanthrene	2013/03/18	90	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6661338	Anthracene	2013/03/18	94	60 - 130	92	60 - 130	<0.0040	mg/kg	NC	50		
6661338	Fluoranthene	2013/03/18	96	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
6661338	Pyrene	2013/03/18	92	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(a)anthracene	2013/03/18	92	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6661338	Chrysene	2013/03/18	93	60 - 130	94	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(b&j)fluoranthene	2013/03/18	98	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(k)fluoranthene	2013/03/18	95	60 - 130	97	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(a)pyrene	2013/03/18	98	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6661338	Indeno(1,2,3-cd)pyrene	2013/03/18	107	60 - 130	94	60 - 130	<0.050	mg/kg	NC	50		
6661338	Dibenz(a,h)anthracene	2013/03/18	107	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
6661338	Benzo(g,h,i)perylene	2013/03/18	100	60 - 130	90	60 - 130	<0.050	mg/kg	NC	50		
6661571	Saturation %	2013/03/19			110	80 - 120	<1.0	%	0.2	30		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6661572	Soluble pH	2013/03/19			100	97 - 103			0.1	20		
6661574	Soluble Conductivity	2013/03/20			94	70 - 130	<1.0	uS/cm	3.4	35		
6661575	Saturation %	2013/03/19			110	80 - 120	<1.0	%	0.2	30		
6661579	Soluble pH	2013/03/19			100	97 - 103			0.1	20		
6661581	Soluble Conductivity	2013/03/20			93	70 - 130	<1.0	uS/cm	1.2	35		
6665360	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	1.6	30		
6665360	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6665360	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6665360	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	4.7	30		
6665360	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6665485	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	NC	30		
6665485	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6665485	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6665485	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	NC	30		
6665485	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6665883	Soluble Chloride (Cl)	2013/03/19					<5.0	mg/L	1.6	30		
6665884	Soluble Sulphate (SO4)	2013/03/19					<10	mg/L	0.8	30		
6665885	Soluble Chloride (Cl)	2013/03/19					<5.0	mg/L	NC	30		
6665887	Soluble Sulphate (SO4)	2013/03/19					<10	mg/L	NC	30		
6669301	Soluble Chloride (Cl)	2013/03/20					<5.0	mg/L	NC	30		
6669371	Soluble Sulphate (SO4)	2013/03/20					<10	mg/L	0.2	30		
6680316	Leachate D10-ANTHRACENE (sur.)	2013/03/24			98	60 - 130	101	%				
6680316	Leachate D8-ACENAPHTHYLENE (sur.)	2013/03/24			88	50 - 130	92	%				
6680316	Leachate D8-NAPHTHALENE (sur.)	2013/03/24			81	50 - 130	87	%				

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Maxxam Job #: B318798
Report Date: 2013/03/25

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6680316	Leachate TERPHENYL-D14 (sur.)	2013/03/24			101	60 - 130	105	%				
6680316	Leachate Benzo(a)pyrene	2013/03/24			89	60 - 130	<0.10	ug/L				

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample dilution.
(2) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(3) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 530 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B318798	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-03-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FV2197	SP13-135-130308	13/03/08		Soil		X	X	X	X	X		X				2	
2	FV2198	SP13-136-130308							X	X			X				2	
3	FV2199	SP13-137-130308					X	X	X	X	X		X				2	
4	FV2200	SP13-138-130308							X	X			X				2	
5	FV2201	SP13-139-130308							X	X			X				2	
6	FV2202	SP13-140-130308							X	X			X				2	B318798
7	FV2203	SP13-140-01-130308							X	X			X				2	
8	FV2204	SP13-141-130308							X	X			X				2	
9	FV2205	SP13-142-130308							X	X			X				2	
10	FV2206	SP13-143-130308					X	X	X	X	X		X				2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Shawn Batten	13/03/08	16:00	Nahed Amer	13/03/09	09:20		[ ]	3.4 / 1.3.5	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free:(800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 354772
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#354772-04-01	Kim Dorono
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (If applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FV2207	SP13-131-130307	13/03/07		Soil				x	x			x				2	
2	208	SP13-132-130307							x	x			x				2	
3	209	SP13-133-130307					x	x	x	x	x		x				2	
4		SP13-134-130307							x	x			x				2	
5	FV2207	SP13-144-130308	13/03/08		Soil				x	x			x				2	
6	FV2208	SP13-145-130308							x	x			x				2	8318798
7	FV2209	SP13-146-130308							x	x			x				2	
8	FV2210	SP13-147-130308					x	x	x	x	x		x				2	
9	FV2211	SP13-148-130308							x	x			x				2	
10	FV2212	SP13-149-130308							x	x			x				2	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Shawn Bitten	13/03/08	16:00	Nahed Amer	13/03/09	09:20		[ ]	3.4,4 / 1.3,5	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#354772-06-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:			

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:

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(will be applied if Rush TAT is not specified):
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Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FV2213	SP13-150-130308	13/03/08		Soil				X	X			X				2	
2	FV2214	SP13-150-01-130308							X	X			X				2	
3	FV2215	SP13-151-130308							X	X			X				2	
4	FV2216	SP13-152-130308							X	X			X				2	
5	FV2217	SP13-153-130308					X	X	X	X	X		X				2	
6	FV2218	SP13-154-130308							X	X			X				2	
7		~~SP13~~																
8		~~SP13~~																
9		~~SP13~~																9318798
10		~~SP13~~																

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
MARKEDWARDS	13/03/08	16:30	Noted Rynes	13/03/09	09:20		[ ]	3,4,4 | 1,3,5	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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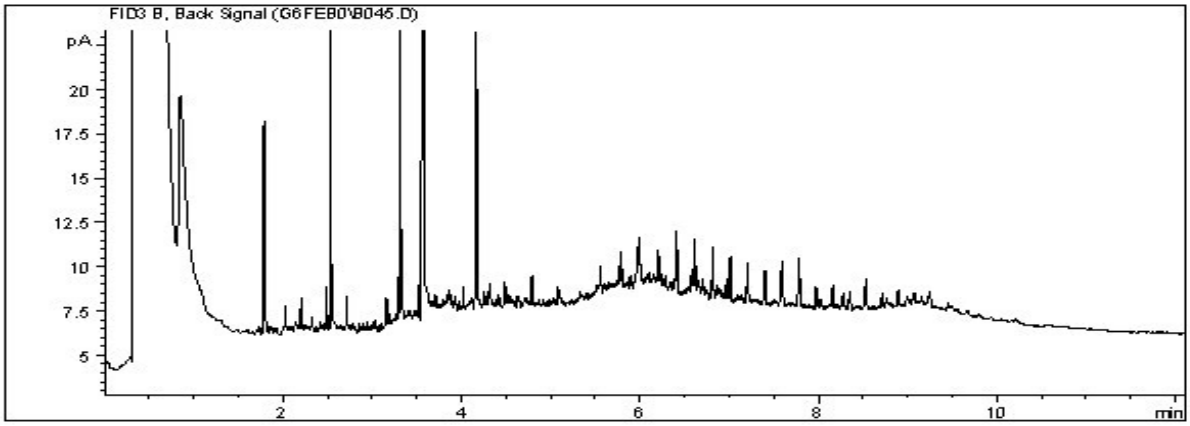
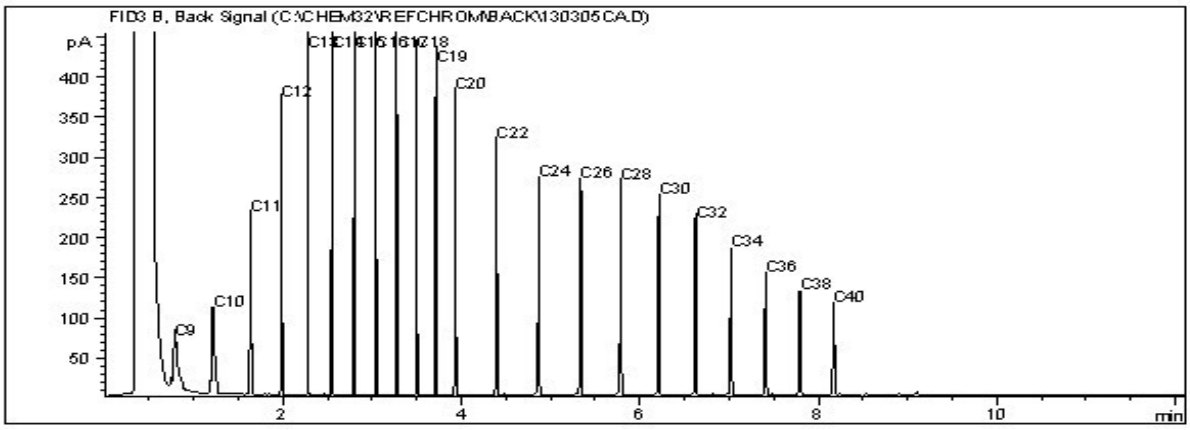
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2197

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-135-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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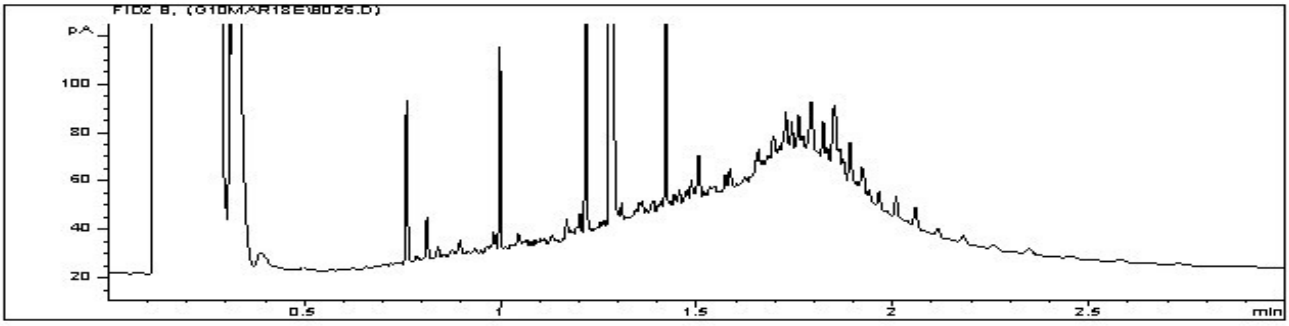
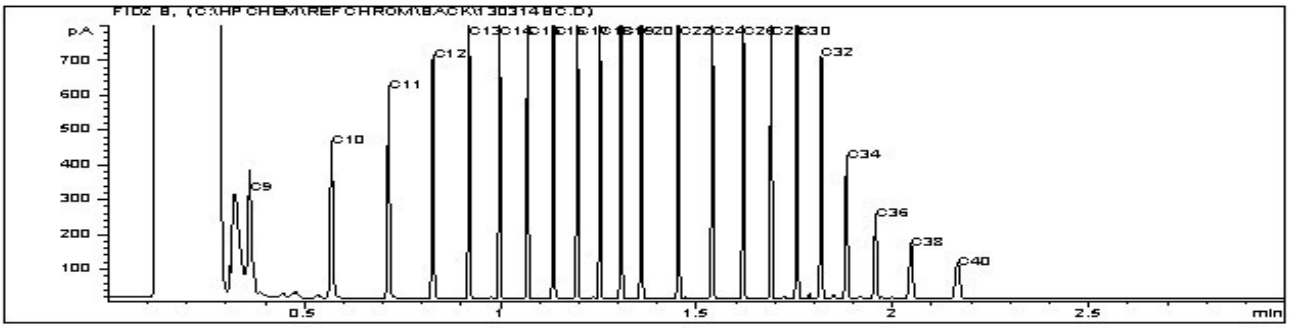
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2197

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-135-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

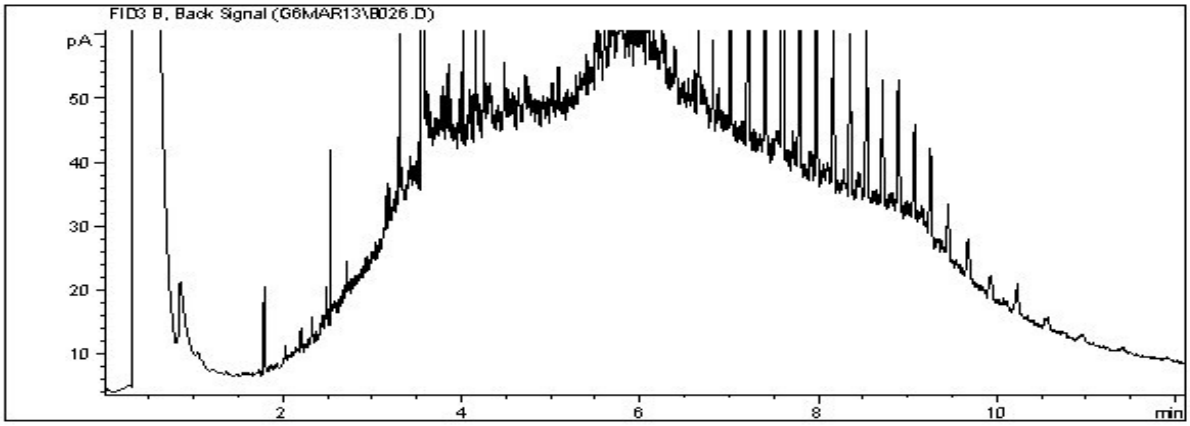
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

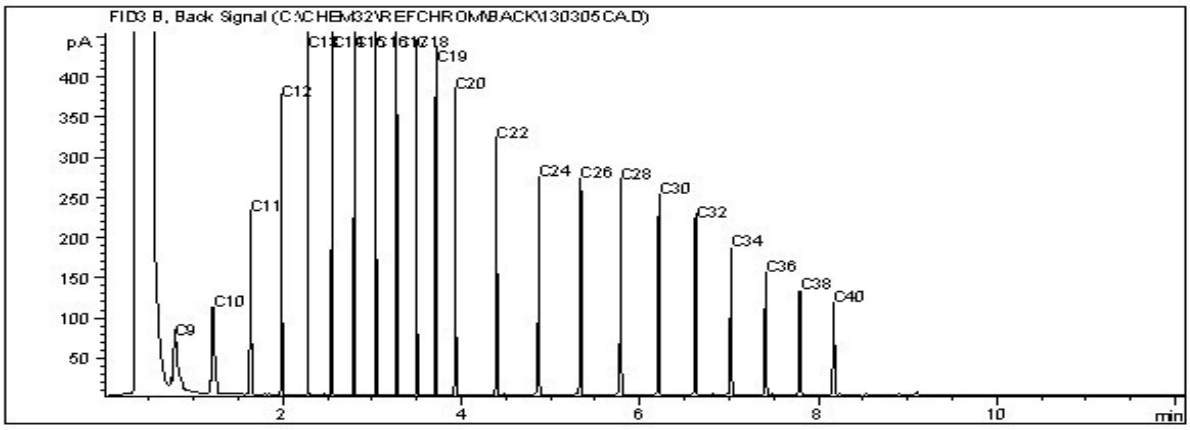
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2199

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-137-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

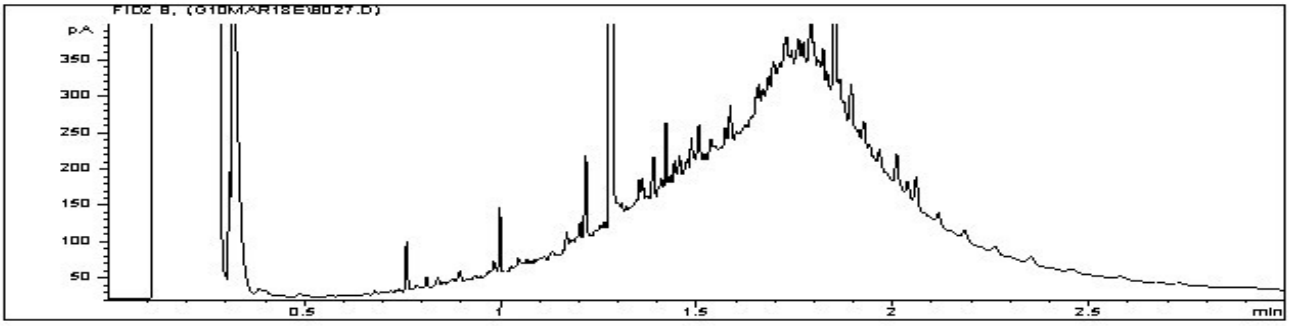
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

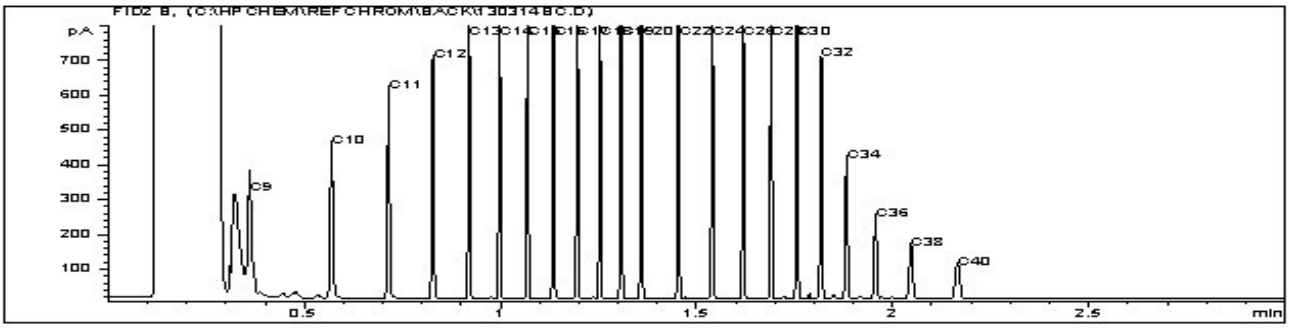
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2199

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-137-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

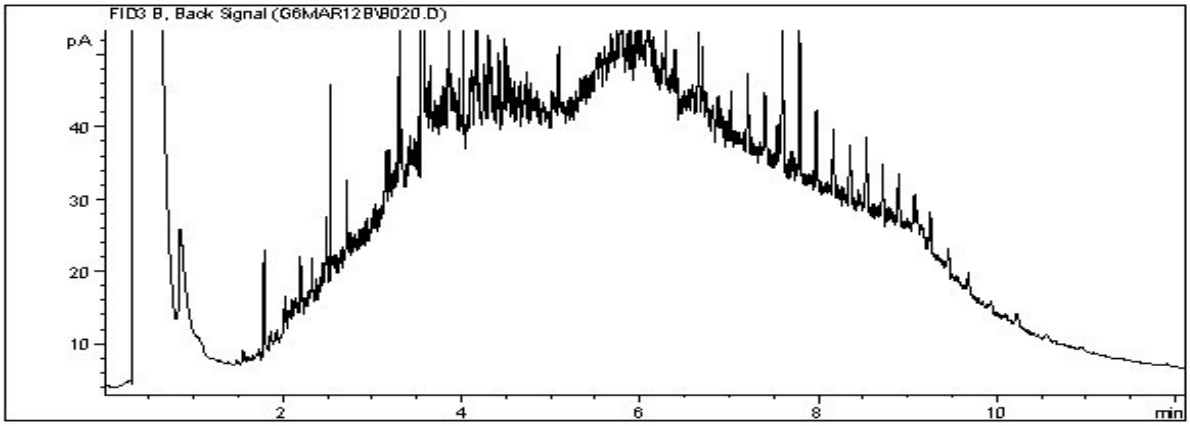
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

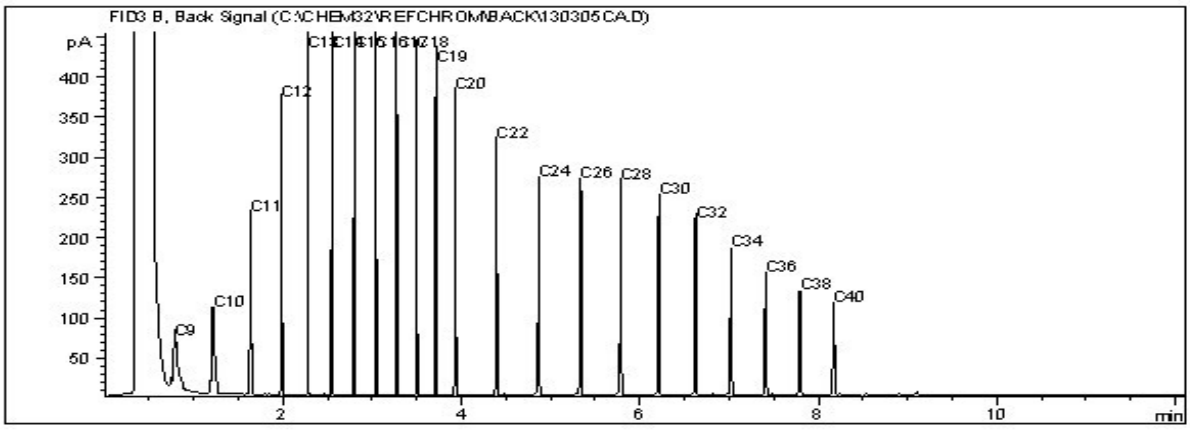
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2199 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-137-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

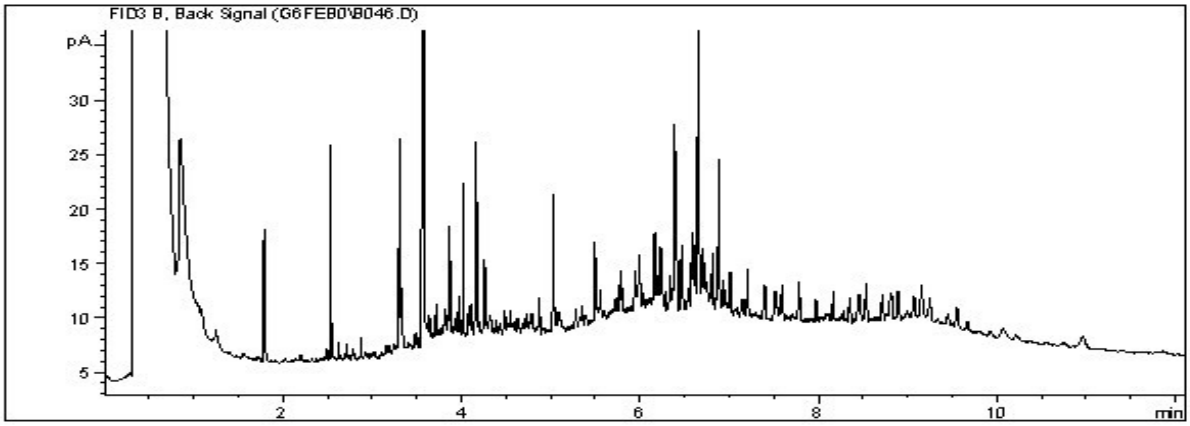
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

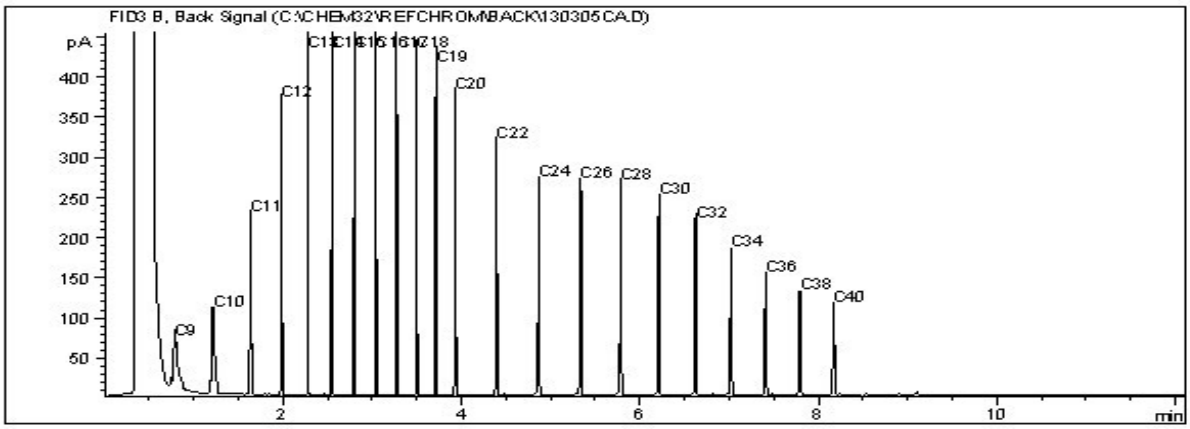
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2206

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-143-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

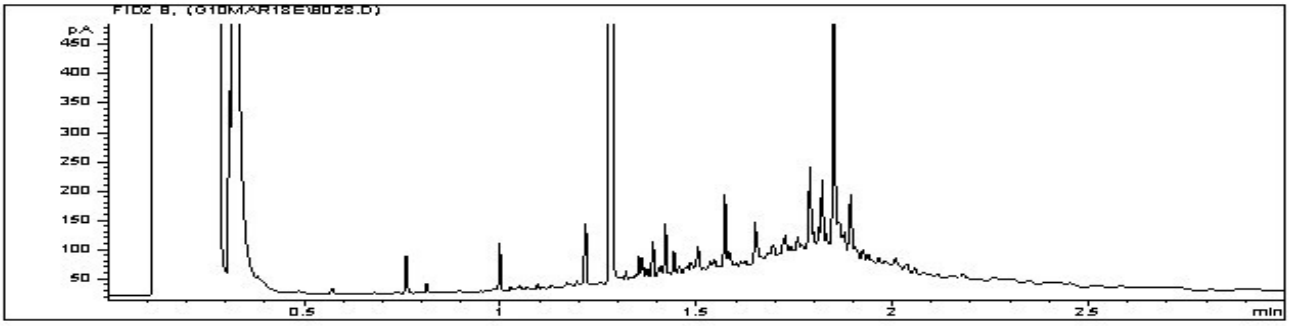
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

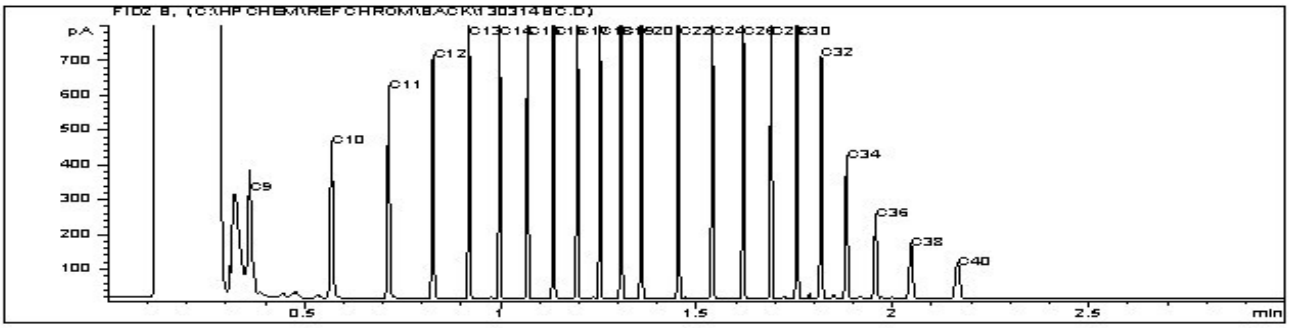
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2206

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-143-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

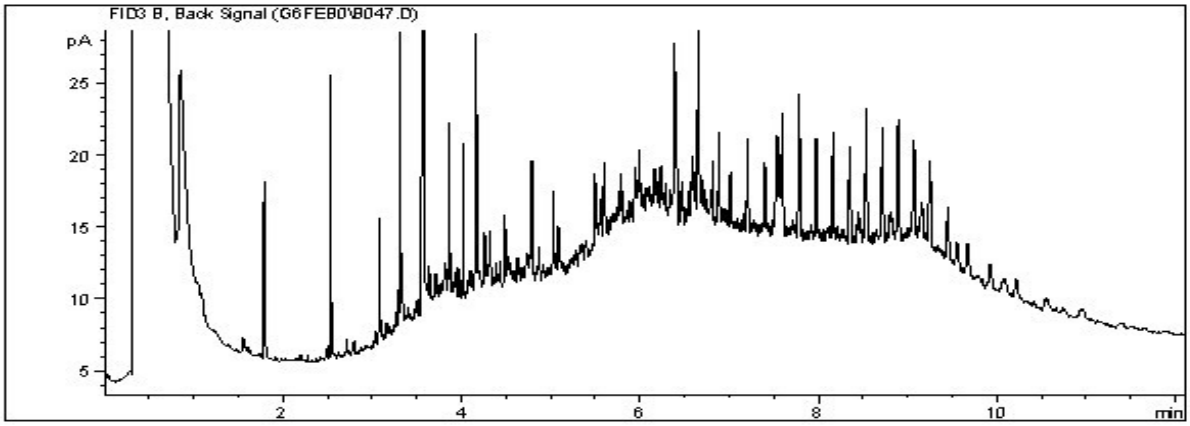
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

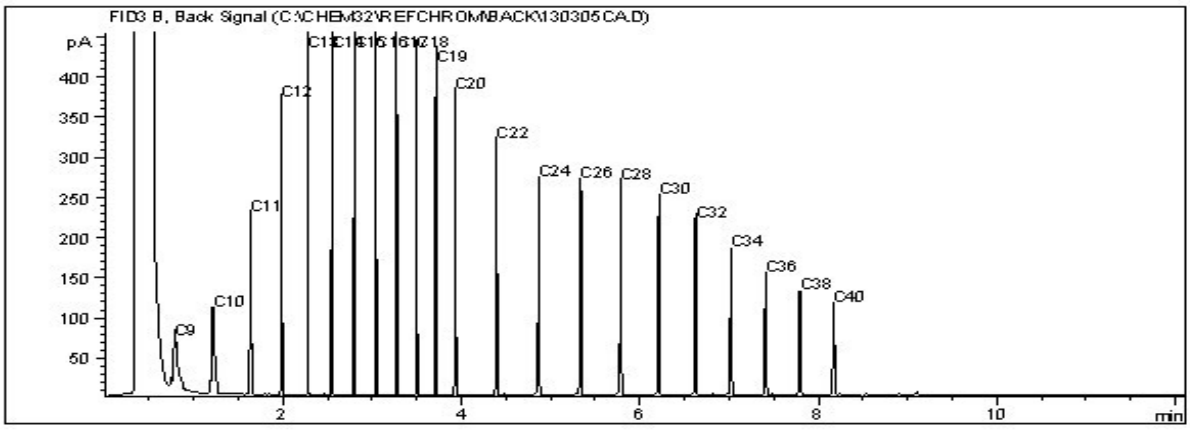
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2210

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-147-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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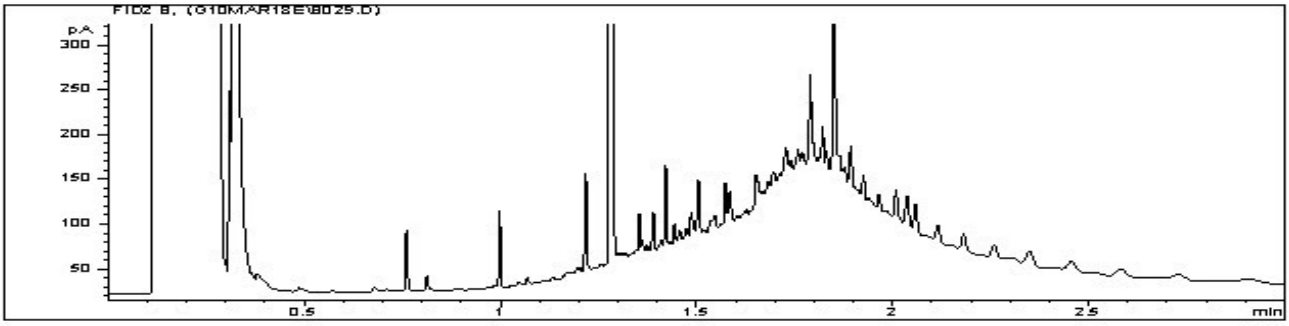
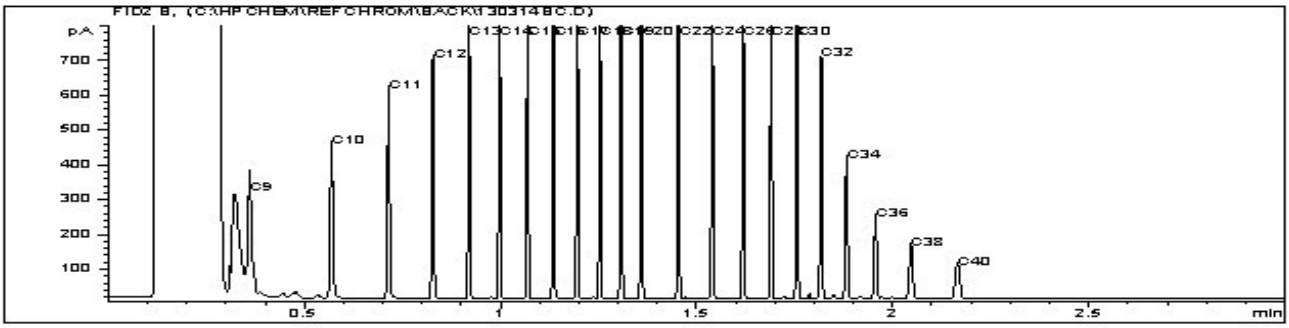
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2210

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-147-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Page 1 of 1

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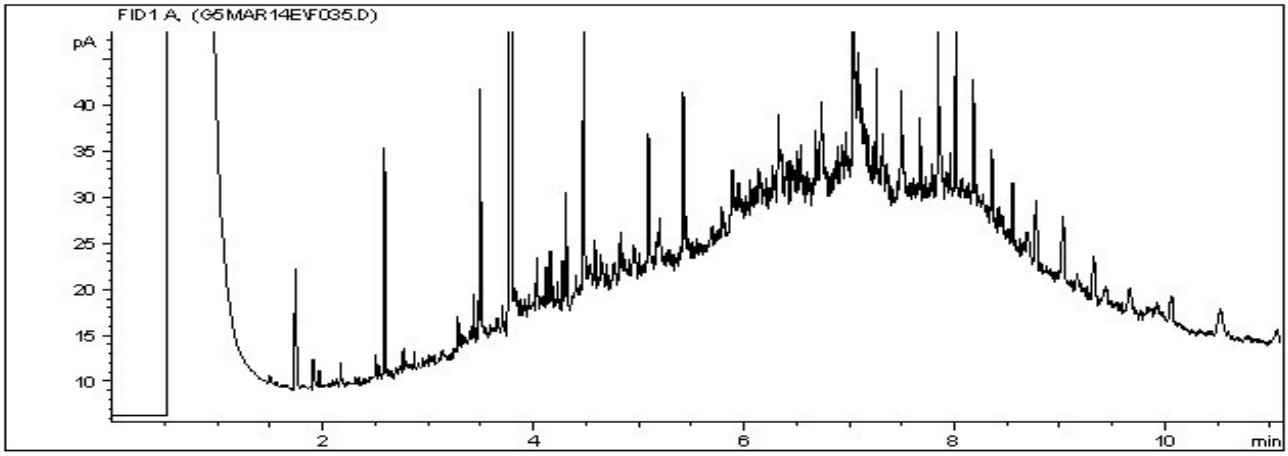
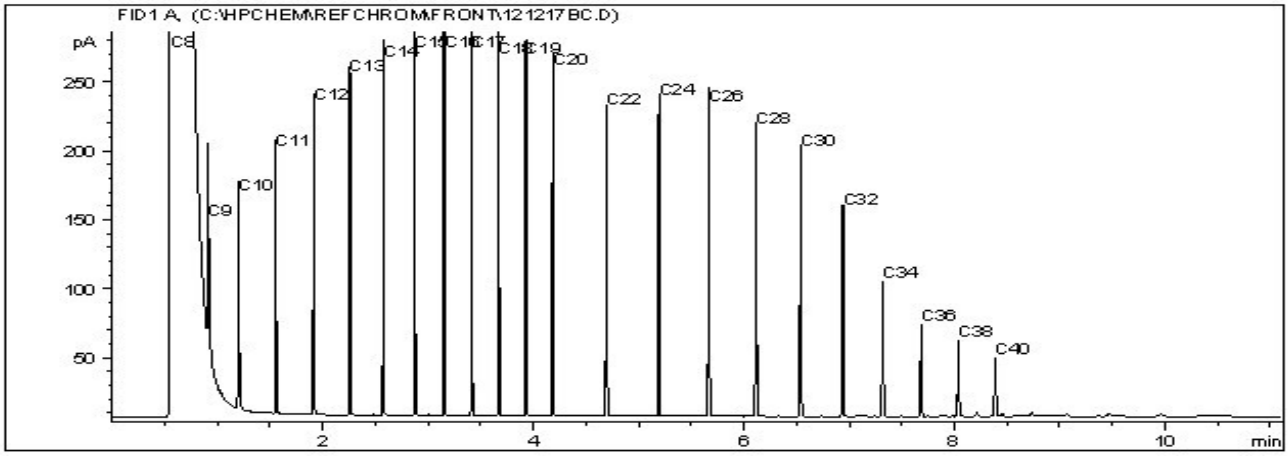
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2217

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-153-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

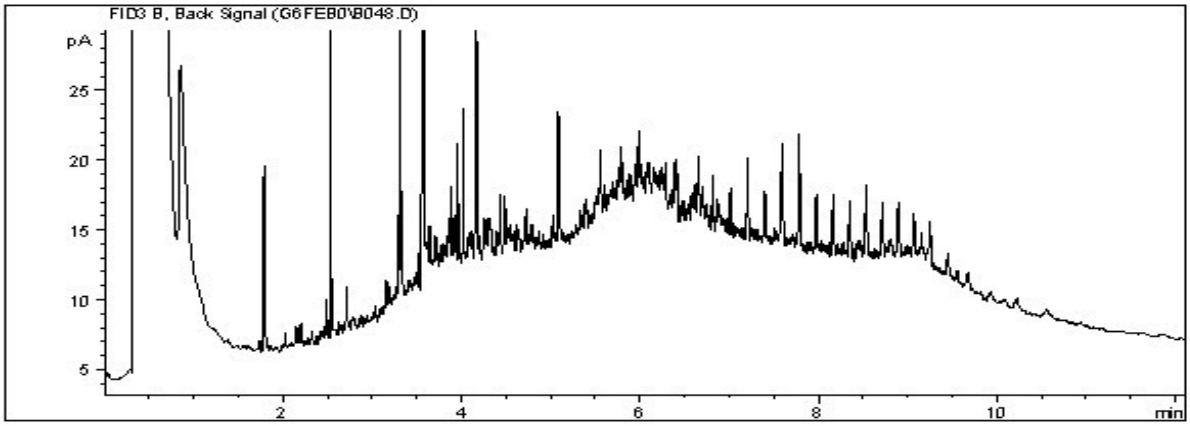
Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

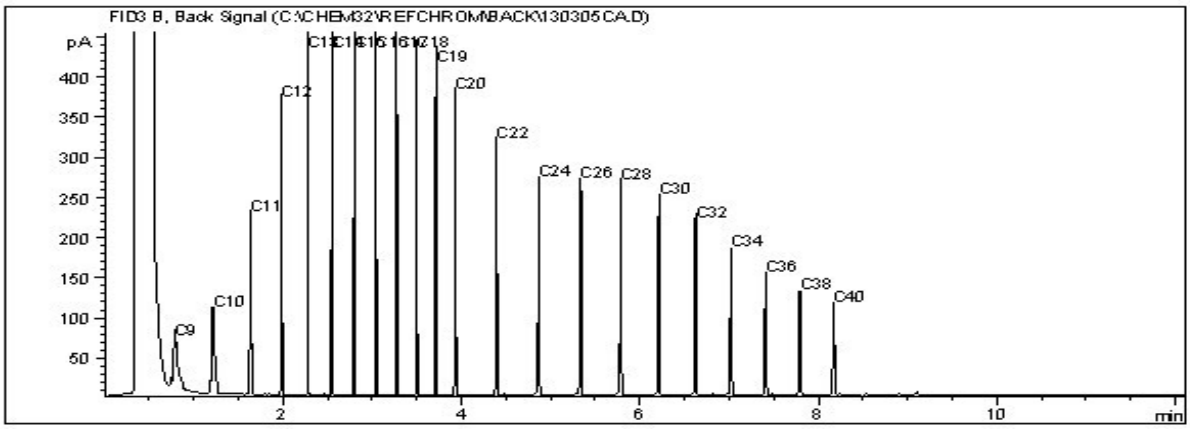
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2217

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-153-130308

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

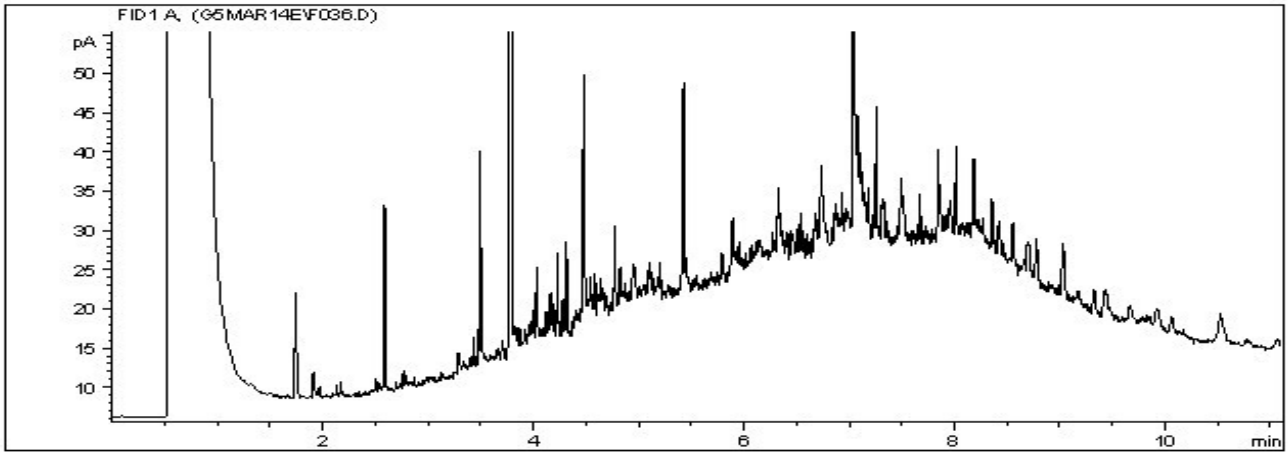
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

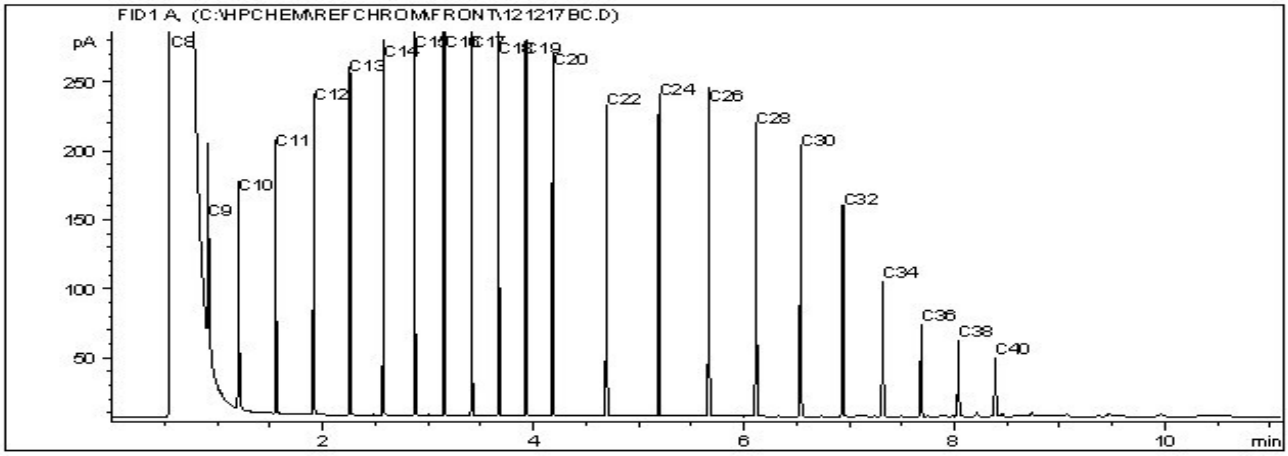
Report Date: 2013/03/25
Maxxam Job #: B318798
Maxxam Sample: FV2217 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-153-130308

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35477207, 35477208, 35477209

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B319341
Received: 2013/03/12, 08:00

Sample Matrix: Soil
Samples Received: 21

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/14	2013/03/16	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	21	2013/03/19	2013/03/20	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	21	2013/03/19	2013/03/20	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	1	N/A	2013/03/17	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	1	2013/03/14	2013/03/19	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	21	2013/03/14	2013/03/15	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	1	N/A	2013/03/15	BBY6SOP-00039	Carter SSMA 47.4
Moisture	3	N/A	2013/03/15	BBY8SOP-00017	Ont MOE -E 3139
Moisture	18	N/A	2013/03/16	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	2	2013/03/14	2013/03/18	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/14	2013/03/19	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/15	2013/03/16	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/03/15	2013/03/18	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	14	2013/03/15	2013/03/19	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	1	N/A	2013/03/18	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	20	N/A	2013/03/19	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	1	N/A	2013/03/18	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	20	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	21	2013/03/15	2013/03/15	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	21	2013/03/19	2013/03/20	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	21	N/A	2013/03/15		
Saturated Paste	21	2013/03/19	2013/03/20	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	21	N/A	2013/03/20		
Sulphate (soluble) (soil)	21	2013/03/19	2013/03/20	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	21	N/A	2013/03/20	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	1	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	1	2013/03/14	2013/03/19	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FV7820		
Sampling Date		2013/03/11		
	UNITS	**SP13-158-130311**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	6661593
F3 (C16-C34 Hydrocarbons)	mg/kg	59	10	6661593
F4 (C34-C50 Hydrocarbons)	mg/kg	75	10	6661593
Reached Baseline at C50	mg/kg	NO	N/A	6661593
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	85		6661593

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FV7822		
Sampling Date		2013/03/11		
	UNITS	**SP13-160-130311**	**RDL**	**QC Batch**
Physical Properties				
200 mesh (>.075 mm)	%	58.5	0.10	6652059
200 mesh (<.075 mm)	%	41.5	0.10	6652059

PHYSICAL TESTING (SOIL)

Maxxam ID		FV7817		FV7818		FV7819		FV7820		
Sampling Date		2013/03/11		2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-155-130311**	**QC Batch**	**SP13-156-130311**	**QC Batch**	**SP13-157-130311**	**QC Batch**	**SP13-158-130311**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	18	6650024	20	6649001	19	6650024	20	0.30	6648286

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PHYSICAL TESTING (SOIL)

Maxxam ID		FV7821	FV7822	FV7823	FV7824	FV7825	FV7826		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-159-130311**	**SP13-160-130311**	**SP13-160-01-130311**	**SP13-161-130311**	**SP13-162-130311**	**SP13-163-130311**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	17	25	20	20	21	21	0.30	6650024

Maxxam ID		FV7852	FV7853		FV7854		FV7855		
Sampling Date		2013/03/11	2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-164-130311**	**SP13-165-130311**	**QC Batch**	**SP13-166-130311**	**QC Batch**	**SP13-167-130311**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	20	24	6650024	21	6649001	20	0.30	6650024

Maxxam ID		FV7856	FV7857	FV7857	FV7858		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-168-130311**	**SP13-169-130311**	**SP13-169-130311 Lab-Dup**	**SP13-170-130311**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	19	19	21	15	0.30	6650024

Maxxam ID		FV7859	FV7860	FV7861	FV7862		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-170-01-130311**	**SP13-171-130311**	**SP13-172-130311**	**SP13-173-130311**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	19	18	16	17	0.30	6650024

RDL = Reportable Detection Limit

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FV7820		
Sampling Date		2013/03/11		
	UNITS	**SP13-158-130311**	**RDL**	**QC Batch**
Calculated Parameters				
LEPH (C10-C19 less PAH)	mg/kg	<100	100	6640761
HEPH (C19-C32 less PAH)	mg/kg	<100	100	6640761
Hydrocarbons				
EPH (C10-C19)	mg/kg	<100	100	6663347
EPH (C19-C32)	mg/kg	<100	100	6663347
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	95		6663347

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FV7820		
Sampling Date		2013/03/11		
	UNITS	**SP13-158-130311**	**RDL**	**QC Batch**
Calculated Parameters				
F1 (C6-C10) - BTEX	mg/kg	<10	10	6642186
Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	0.10	6654019
Benzene	mg/kg	<0.0050	0.0050	6654019
Toluene	mg/kg	<0.020	0.020	6654019
Ethylbenzene	mg/kg	<0.010	0.010	6654019
m & p-Xylene	mg/kg	<0.040	0.040	6654019
o-Xylene	mg/kg	<0.040	0.040	6654019
Styrene	mg/kg	<0.030	0.030	6654019
Xylenes (Total)	mg/kg	<0.040	0.040	6654019
(C6-C10)	mg/kg	<10	10	6654019
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	107		6654019
4-BROMOFLUOROBENZENE (sur.)	%	120		6654019
D10-ETHYLBENZENE (sur.)	%	98		6654019
D4-1,2-DICHLOROETHANE (sur.)	%	114		6654019

RDL = Reportable Detection Limit

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV7817		FV7818	FV7819	FV7820	FV7821		
Sampling Date		2013/03/11		2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-155-130311**	**QC Batch**	**SP13-156-130311**	**SP13-157-130311**	**SP13-158-130311**	**SP13-159-130311**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.48	6649277	6.99	7.62	7.56	7.53	0.010	6649262
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22900	6649272	22600	21700	23200	23100	100	6649257
Total Antimony (Sb)	mg/kg	1.04	6649272	6.16	2.99	3.67	3.43	0.10	6649257
Total Arsenic (As)	mg/kg	6.78	6649272	14.8	9.89	10.1	11.1	0.50	6649257
Total Barium (Ba)	mg/kg	82.1	6649272	88.1	87.7	96.0	95.4	0.10	6649257
Total Beryllium (Be)	mg/kg	<0.40	6649272	<0.40	0.41	0.41	<0.40	0.40	6649257
Total Bismuth (Bi)	mg/kg	<0.10	6649272	<0.10	<0.10	<0.10	<0.10	0.10	6649257
Total Cadmium (Cd)	mg/kg	0.196	6649272	0.284	0.263	0.255	0.271	0.050	6649257
Total Calcium (Ca)	mg/kg	7070	6649272	9060	8790	10900	9130	100	6649257
Total Chromium (Cr)	mg/kg	39.2	6649272	38.4	36.5	37.6	33.1	1.0	6649257
Total Cobalt (Co)	mg/kg	12.9	6649272	12.6	11.5	11.8	11.2	0.30	6649257
Total Copper (Cu)	mg/kg	43.2	6649272	72.7	48.4	47.9	38.4	0.50	6649257
Total Iron (Fe)	mg/kg	28100	6649272	28500	26300	26700	25600	100	6649257
Total Lead (Pb)	mg/kg	12.8	6649272	22.6	16.2	19.4	15.2	0.10	6649257
Total Lithium (Li)	mg/kg	14.4	6649272	15.0	14.7	15.1	14.5	5.0	6649257
Total Magnesium (Mg)	mg/kg	6350	6649272	6890	6510	6840	6140	100	6649257
Total Manganese (Mn)	mg/kg	541	6649272	570	524	540	546	0.20	6649257
Total Mercury (Hg)	mg/kg	<0.050	6649272	0.069	0.067	0.088	0.079	0.050	6649257
Total Molybdenum (Mo)	mg/kg	1.13	6649272	2.40	1.69	2.06	2.09	0.10	6649257
Total Nickel (Ni)	mg/kg	28.9	6649272	29.1	27.8	28.2	26.2	0.80	6649257
Total Phosphorus (P)	mg/kg	423	6649272	499	485	488	509	10	6649257
Total Potassium (K)	mg/kg	662	6649272	692	755	667	672	100	6649257
Total Selenium (Se)	mg/kg	<0.50	6649272	<0.50	<0.50	<0.50	<0.50	0.50	6649257
Total Silver (Ag)	mg/kg	0.086	6649272	0.097	0.091	0.106	0.095	0.050	6649257
Total Sodium (Na)	mg/kg	191	6649272	209	256	189	204	100	6649257
Total Strontium (Sr)	mg/kg	37.7	6649272	51.8	56.5	56.8	56.0	0.10	6649257
Total Thallium (Tl)	mg/kg	0.061	6649272	0.065	0.062	0.084	0.081	0.050	6649257
Total Tin (Sn)	mg/kg	0.56	6649272	2.45	1.12	1.65	0.98	0.10	6649257
Total Titanium (Ti)	mg/kg	955	6649272	974	961	996	1010	1.0	6649257
Total Uranium (U)	mg/kg	1.30	6649272	1.30	1.33	1.47	1.67	0.050	6649257
Total Vanadium (V)	mg/kg	72.4	6649272	73.4	69.0	70.1	70.0	2.0	6649257
Total Zinc (Zn)	mg/kg	87.1	6649272	120	106	131	99.5	1.0	6649257
Total Zirconium (Zr)	mg/kg	3.72	6649272	3.19	3.16	3.21	3.09	0.50	6649257

RDL = Reportable Detection Limit

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV7822	FV7823	FV7824	FV7825	FV7826	FV7852		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-160-130311**	**SP13-160-01-130311**	**SP13-161-130311**	**SP13-162-130311**	**SP13-163-130311**	**SP13-164-130311**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.16	7.04	7.27	7.29	6.89	7.49	0.010	6649262
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	21600	21900	21900	22200	22300	23700	100	6649257
Total Antimony (Sb)	mg/kg	0.61	0.77	3.43	6.30	5.22	5.70	0.10	6649257
Total Arsenic (As)	mg/kg	5.22	5.59	9.55	20.5	14.1	16.0	0.50	6649257
Total Barium (Ba)	mg/kg	103	98.7	100	97.4	97.7	105	0.10	6649257
Total Beryllium (Be)	mg/kg	0.49	0.45	0.43	<0.40	0.45	0.50	0.40	6649257
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	0.17	<0.10	0.14	0.10	6649257
Total Cadmium (Cd)	mg/kg	0.190	0.200	0.314	0.344	0.219	0.365	0.050	6649257
Total Calcium (Ca)	mg/kg	7450	5750	7870	8840	5350	12100	100	6649257
Total Chromium (Cr)	mg/kg	27.3	30.0	29.9	33.7	29.4	37.5	1.0	6649257
Total Cobalt (Co)	mg/kg	9.24	9.94	10.5	11.2	10.4	12.9	0.30	6649257
Total Copper (Cu)	mg/kg	24.2	29.3	40.4	47.7	34.6	67.7	0.50	6649257
Total Iron (Fe)	mg/kg	22900	24000	24500	26100	24500	28900	100	6649257
Total Lead (Pb)	mg/kg	9.41	9.20	16.5	22.2	17.7	26.2	0.10	6649257
Total Lithium (Li)	mg/kg	12.2	12.9	13.3	13.7	12.8	15.8	5.0	6649257
Total Magnesium (Mg)	mg/kg	5330	5530	5770	6070	6020	8240	100	6649257
Total Manganese (Mn)	mg/kg	588	576	574	572	561	634	0.20	6649257
Total Mercury (Hg)	mg/kg	0.055	<0.050	0.066	0.077	0.062	0.113	0.050	6649257
Total Molybdenum (Mo)	mg/kg	1.15	0.94	1.78	1.62	1.25	1.86	0.10	6649257
Total Nickel (Ni)	mg/kg	23.0	23.0	24.6	28.0	25.6	30.2	0.80	6649257
Total Phosphorus (P)	mg/kg	748	658	657	648	747	676	10	6649257
Total Potassium (K)	mg/kg	567	611	615	676	666	817	100	6649257
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6649257
Total Silver (Ag)	mg/kg	0.081	0.073	0.069	0.087	0.100	0.107	0.050	6649257
Total Sodium (Na)	mg/kg	140	167	172	181	183	259	100	6649257
Total Strontium (Sr)	mg/kg	48.2	35.9	51.6	50.0	35.9	87.3	0.10	6649257
Total Thallium (Tl)	mg/kg	0.071	0.067	0.066	0.074	0.070	0.076	0.050	6649257
Total Tin (Sn)	mg/kg	0.62	0.63	1.09	1.92	1.54	1.95	0.10	6649257
Total Titanium (Ti)	mg/kg	944	997	857	998	918	1130	1.0	6649257
Total Uranium (U)	mg/kg	1.29	1.11	1.48	1.26	0.929	0.991	0.050	6649257
Total Vanadium (V)	mg/kg	63.2	66.7	64.4	68.3	66.1	77.3	2.0	6649257
Total Zinc (Zn)	mg/kg	74.9	74.6	111	158	108	151	1.0	6649257
Total Zirconium (Zr)	mg/kg	3.07	3.11	2.88	3.10	3.07	3.64	0.50	6649257

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV7853	FV7854	FV7855	FV7856	FV7857	FV7858		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-165-130311**	**SP13-166-130311**	**SP13-167-130311**	**SP13-168-130311**	**SP13-169-130311**	**SP13-170-130311**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.64	7.28	7.58	6.81	7.07	7.61	0.010	6649262
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	23000	22300	21900	22700	22400	21300	100	6649257
Total Antimony (Sb)	mg/kg	22.3	3.80	9.76	1.14	7.46	28.0	0.10	6649257
Total Arsenic (As)	mg/kg	44.6	9.54	22.4	6.00	14.4	46.8	0.50	6649257
Total Barium (Ba)	mg/kg	105	93.7	98.9	99.9	97.6	93.3	0.10	6649257
Total Beryllium (Be)	mg/kg	0.40	<0.40	0.43	0.45	<0.40	0.41	0.40	6649257
Total Bismuth (Bi)	mg/kg	0.18	0.11	0.13	<0.10	<0.10	0.16	0.10	6649257
Total Cadmium (Cd)	mg/kg	0.424	0.230	0.340	0.179	0.238	0.399	0.050	6649257
Total Calcium (Ca)	mg/kg	11300	9630	10700	5330	5900	8760	100	6649257
Total Chromium (Cr)	mg/kg	36.3	32.8	36.0	30.0	29.9	36.9	1.0	6649257
Total Cobalt (Co)	mg/kg	13.3	10.9	12.4	10.7	10.9	13.5	0.30	6649257
Total Copper (Cu)	mg/kg	76.9	38.9	73.2	29.7	41.0	89.9	0.50	6649257
Total Iron (Fe)	mg/kg	28700	25300	27000	24400	24500	28300	100	6649257
Total Lead (Pb)	mg/kg	49.6	16.5	33.3	11.2	20.1	108	0.10	6649257
Total Lithium (Li)	mg/kg	14.6	13.7	13.3	12.6	12.8	13.7	5.0	6649257
Total Magnesium (Mg)	mg/kg	7300	6290	7180	5890	6150	7400	100	6649257
Total Manganese (Mn)	mg/kg	576	564	547	631	547	575	0.20	6649257
Total Mercury (Hg)	mg/kg	0.095	0.071	0.100	0.052	0.065	0.126	0.050	6649257
Total Molybdenum (Mo)	mg/kg	3.07	1.46	2.38	0.82	1.25	2.73	0.10	6649257
Total Nickel (Ni)	mg/kg	29.0	26.2	29.0	25.2	26.2	29.1	0.80	6649257
Total Phosphorus (P)	mg/kg	648	605	635	703	629	635	10	6649257
Total Potassium (K)	mg/kg	763	653	703	658	645	769	100	6649257
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6649257
Total Silver (Ag)	mg/kg	0.130	0.098	0.122	0.075	0.084	0.137	0.050	6649257
Total Sodium (Na)	mg/kg	301	197	244	163	170	313	100	6649257
Total Strontium (Sr)	mg/kg	85.0	58.2	96.2	35.8	40.9	60.9	0.10	6649257
Total Thallium (Tl)	mg/kg	0.080	0.063	0.072	0.077	0.073	0.074	0.050	6649257
Total Tin (Sn)	mg/kg	4.47	1.26	2.34	0.86	1.86	5.42	0.10	6649257
Total Titanium (Ti)	mg/kg	1030	996	1020	942	941	1100	1.0	6649257
Total Uranium (U)	mg/kg	1.39	1.26	1.20	0.928	0.940	1.31	0.050	6649257
Total Vanadium (V)	mg/kg	70.9	67.3	71.0	66.6	66.1	73.3	2.0	6649257
Total Zinc (Zn)	mg/kg	290	97.5	179	80.7	119	292	1.0	6649257
Total Zirconium (Zr)	mg/kg	3.11	3.06	3.10	3.04	2.82	3.14	0.50	6649257

RDL = Reportable Detection Limit

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FV7859	FV7860	FV7861	FV7862	FV7862		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-170-01-130311**	**SP13-171-130311**	**SP13-172-130311**	**SP13-173-130311**	**SP13-173-130311 Lab-Dup**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.68	7.52	7.85	7.78	7.82	0.010	6649262
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	21500	20600	21700	20400	20700	100	6649257
Total Antimony (Sb)	mg/kg	33.5	6.42	6.44	5.22	5.44	0.10	6649257
Total Arsenic (As)	mg/kg	58.9	18.4	16.7	18.2	18.7	0.50	6649257
Total Barium (Ba)	mg/kg	92.8	86.0	84.1	79.9	83.0	0.10	6649257
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	0.43	0.40	6649257
Total Bismuth (Bi)	mg/kg	0.18	0.10	<0.10	0.12	0.11	0.10	6649257
Total Cadmium (Cd)	mg/kg	0.454	0.387	0.351	0.440	0.452	0.050	6649257
Total Calcium (Ca)	mg/kg	9130	10100	9370	11200	11400	100	6649257
Total Chromium (Cr)	mg/kg	39.5	36.6	36.4	37.3	37.3	1.0	6649257
Total Cobalt (Co)	mg/kg	15.1	12.6	14.5	13.1	13.0	0.30	6649257
Total Copper (Cu)	mg/kg	96.1	62.9	67.5	67.1	68.9	0.50	6649257
Total Iron (Fe)	mg/kg	30200	27700	30200	29000	29600	100	6649257
Total Lead (Pb)	mg/kg	62.6	107	41.4	45.0	46.2	0.10	6649257
Total Lithium (Li)	mg/kg	13.3	15.9	14.5	16.2	17.1	5.0	6649257
Total Magnesium (Mg)	mg/kg	7380	7590	8670	8120	8330	100	6649257
Total Manganese (Mn)	mg/kg	526	553	570	574	584	0.20	6649257
Total Mercury (Hg)	mg/kg	0.141	0.294	0.160	0.232	0.243	0.050	6649257
Total Molybdenum (Mo)	mg/kg	3.61	1.52	1.32	1.40	1.42	0.10	6649257
Total Nickel (Ni)	mg/kg	29.7	29.9	30.5	31.0	31.7	0.80	6649257
Total Phosphorus (P)	mg/kg	570	649	639	651	666	10	6649257
Total Potassium (K)	mg/kg	740	1090	912	1160	1180	100	6649257
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6649257
Total Silver (Ag)	mg/kg	0.161	0.081	0.103	0.107	0.101	0.050	6649257
Total Sodium (Na)	mg/kg	366	315	325	391	407	100	6649257
Total Strontium (Sr)	mg/kg	60.2	68.4	58.4	74.3	75.0	0.10	6649257
Total Thallium (Tl)	mg/kg	0.082	0.088	0.076	0.070	0.082	0.050	6649257
Total Tin (Sn)	mg/kg	5.85	3.10	2.86	1.99	2.00	0.10	6649257
Total Titanium (Ti)	mg/kg	1110	1050	1060	1050	1050	1.0	6649257
Total Uranium (U)	mg/kg	1.32	0.787	0.641	0.687	0.727	0.050	6649257
Total Vanadium (V)	mg/kg	74.5	71.4	76.9	74.0	73.8	2.0	6649257
Total Zinc (Zn)	mg/kg	305	159	146	190	193	1.0	6649257
Total Zirconium (Zr)	mg/kg	3.29	3.41	3.82	3.72	3.80	0.50	6649257

RDL = Reportable Detection Limit

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV7817	FV7818	FV7819	FV7820	FV7821	FV7822		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-155-130311**	**SP13-156-130311**	**SP13-157-130311**	**SP13-158-130311**	**SP13-159-130311**	**SP13-160-130311**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.44	0.65	0.71	0.96	0.50	0.38	0.10	6642196
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6642196
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	<0.010	0.011	<0.010	0.012	0.010	6658664
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6658664
Acenaphthylene	mg/kg	<0.0050	0.0086	0.0075	0.0057	<0.0050	<0.0050	0.0050	6658664
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	0.0050	6658664
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6658664
Phenanthrene	mg/kg	0.034	<0.020	0.030	0.070	0.027	0.036	0.020	6658664
Anthracene	mg/kg	0.0064	0.0073	0.0092	0.013	0.0053	0.0045	0.0040	6658664
Fluoranthene	mg/kg	0.049	0.043	0.067	0.10	0.049	0.039	0.020	6658664
Pyrene	mg/kg	0.046	0.043	0.072	0.094	0.037	0.026	0.020	6658664
Benzo(a)anthracene	mg/kg	<0.020	<0.020	0.032	0.037	<0.020	<0.020	0.020	6658664
Chrysene	mg/kg	0.025	0.025	0.041	0.058	0.026	<0.020	0.020	6658664
Benzo(b&j)fluoranthene	mg/kg	0.030	0.051	0.050	0.068	0.034	0.021	0.020	6658664
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.024	<0.020	<0.020	0.020	6658664
Benzo(a)pyrene	mg/kg	<0.020	0.037	0.037	0.046	0.023	<0.020	0.020	6658664
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6658664
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6658664
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6658664
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050	0.11	<0.050	0.053	0.050	6640760
High Molecular Weight PAH`s	mg/kg	0.15	0.23	0.33	0.47	0.19	0.085	0.050	6640760
Total PAH	mg/kg	0.19	0.25	0.38	0.58	0.22	0.14	0.050	6640760
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	86	102	96	97	104	100		6658664
D8-ACENAPHTHYLENE (sur.)	%	82	93	86	93	94	93		6658664
D8-NAPHTHALENE (sur.)	%	86	96	90	97	97	97		6658664
TERPHENYL-D14 (sur.)	%	93	107	99	103	107	105		6658664

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV7823	FV7824	FV7825	FV7826	FV7852		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-160-01-130311**	**SP13-161-130311**	**SP13-162-130311**	**SP13-163-130311**	**SP13-164-130311**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	0.42	0.58	0.82	0.76	4.0	0.10	6642196
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	0.32	0.10	6642196
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.018	0.010	6658664
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6658664
Acenaphthylene	mg/kg	<0.0050	0.0050	<0.0050	0.0085	0.015	0.0050	6658664
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.017	0.0050	6658664
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.021	0.020	6658664
Phenanthrene	mg/kg	0.022	0.031	0.062	0.027	0.28	0.020	6658664
Anthracene	mg/kg	<0.0040	0.0066	0.013	0.0083	0.056	0.0040	6658664
Fluoranthene	mg/kg	0.037	0.057	0.091	0.057	0.50	0.020	6658664
Pyrene	mg/kg	0.026	0.058	0.083	0.058	0.51	0.020	6658664
Benzo(a)anthracene	mg/kg	<0.020	0.022	0.034	0.028	0.16	0.020	6658664
Chrysene	mg/kg	<0.020	0.032	0.045	0.043	0.26	0.020	6658664
Benzo(b&j)fluoranthene	mg/kg	0.027	0.038	0.053	0.057	0.33	0.020	6658664
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	0.020	<0.020	0.084	0.020	6658664
Benzo(a)pyrene	mg/kg	<0.020	0.029	0.042	0.041	0.21	0.020	6658664
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.17	0.050	6658664
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6658664
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.21	0.050	6658664
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	0.075	<0.050	0.40	0.050	6640760
High Molecular Weight PAH`s	mg/kg	0.091	0.26	0.40	0.32	2.7	0.050	6640760
Total PAH	mg/kg	0.11	0.30	0.48	0.37	3.1	0.050	6640760
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	99	101	105	106	108		6658664
D8-ACENAPHTHYLENE (sur.)	%	94	93	96	97	96		6658664
D8-NAPHTHALENE (sur.)	%	96	97	99	101	99		6658664
TERPHENYL-D14 (sur.)	%	104	105	108	110	109		6658664

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV7853	FV7854	FV7855		FV7856		
Sampling Date		2013/03/11	2013/03/11	2013/03/11		2013/03/11		
	UNITS	**SP13-165-130311**	**SP13-166-130311**	**SP13-167-130311**	**QC Batch**	**SP13-168-130311**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	1.1	0.63	1.4	6642196	5.3	0.10	6642196
Benzo[a]pyrene equivalency	N/A	0.10	<0.10	0.12	6642196	0.40	0.10	6642196
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.010	<0.010	<0.010	6658664	<0.010	0.010	6655917
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	6658664	<0.020	0.020	6655917
Acenaphthylene	mg/kg	0.010	0.0061	0.015	6658664	<0.0050	0.0050	6655917
Acenaphthene	mg/kg	0.0055	<0.0050	<0.0050	6658664	<0.0050	0.0050	6655917
Fluorene	mg/kg	<0.020	<0.020	<0.020	6658664	<0.020	0.020	6655917
Phenanthrene	mg/kg	0.070	0.026	0.052	6658664	0.21(1)	0.020	6655917
Anthracene	mg/kg	0.019	0.0067	0.018	6658664	0.039	0.0040	6655917
Fluoranthene	mg/kg	0.12	0.053	0.15	6658664	0.70(2)	0.020	6655917
Pyrene	mg/kg	0.12	0.053	0.14	6658664	0.50(3)	0.020	6655917
Benzo(a)anthracene	mg/kg	0.049	0.021	0.070	6658664	0.28(1)	0.020	6655917
Chrysene	mg/kg	0.066	0.032	0.076	6658664	0.32(1)	0.020	6655917
Benzo(b&j)fluoranthene	mg/kg	0.082	0.045	0.095	6658664	0.39(3)	0.020	6655917
Benzo(k)fluoranthene	mg/kg	0.026	<0.020	0.033	6658664	0.14(1)	0.020	6655917
Benzo(a)pyrene	mg/kg	0.058	0.030	0.071	6658664	0.28(1)	0.020	6655917
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	6658664	0.12	0.050	6655917
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	6658664	<0.050	0.050	6655917
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	6658664	0.13(4)	0.050	6655917
Low Molecular Weight PAH`s	mg/kg	0.10	<0.050	0.085	6640760	0.25	0.050	6640760
High Molecular Weight PAH`s	mg/kg	0.57	0.27	0.69	6640760	3.1	0.050	6640760
Total PAH	mg/kg	0.67	0.30	0.78	6640760	3.4	0.050	6640760
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	112	110	109	6658664	94		6655917
D8-ACENAPHTHYLENE (sur.)	%	104	100	106	6658664	92		6655917
D8-NAPHTHALENE (sur.)	%	109	106	109	6658664	97		6655917
TERPHENYL-D14 (sur.)	%	115	114	116	6658664	97		6655917

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate exceeds acceptance criteria due to sample non homogeneity.
(2) - Duplicate exceeds acceptance criteria due to sample non homogeneity.
Matrix spike below acceptance limits due to matrix interference.
(3) - Matrix spike below acceptance limits due to matrix interference.
Duplicate exceeds acceptance criteria due to sample non homogeneity.
(4) - Matrix spike below acceptance limits due to matrix interference.

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV7856		FV7857	FV7858	FV7859		
Sampling Date		2013/03/11		2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-168-130311 Lab-Dup**	**QC Batch**	**SP13-169-130311**	**SP13-170-130311**	**SP13-170-01-130311**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A		6642196	0.42	1.5	1.3	0.10	6642196
Benzo[a]pyrene equivalency	N/A		6642196	<0.10	0.13	0.11	0.10	6642196
Polycyclic Aromatics								
Naphthalene	mg/kg	0.011	6655917	<0.010	0.030	0.018	0.010	6658664
2-Methylnaphthalene	mg/kg	<0.020	6655917	<0.020	0.023	<0.020	0.020	6658664
Acenaphthylene	mg/kg	0.011	6655917	<0.0050	0.0099	0.012	0.0050	6658664
Acenaphthene	mg/kg	<0.0050	6655917	<0.0050	0.026	0.010	0.0050	6658664
Fluorene	mg/kg	<0.020	6655917	<0.020	0.023	<0.020	0.020	6658664
Phenanthrene	mg/kg	0.11(1)	6655917	0.020	0.14	0.087	0.020	6658664
Anthracene	mg/kg	0.024	6655917	<0.0040	0.032	0.020	0.0040	6658664
Fluoranthene	mg/kg	0.18(1)	6655917	0.038	0.18	0.14	0.020	6658664
Pyrene	mg/kg	0.16(1)	6655917	0.037	0.18	0.14	0.020	6658664
Benzo(a)anthracene	mg/kg	0.079	6655917	<0.020	0.072	0.048	0.020	6658664
Chrysene	mg/kg	0.098	6655917	0.022	0.093	0.072	0.020	6658664
Benzo(b&j)fluoranthene	mg/kg	0.12(1)	6655917	0.027	0.11	0.098	0.020	6658664
Benzo(k)fluoranthene	mg/kg	0.040	6655917	<0.020	0.033	0.027	0.020	6658664
Benzo(a)pyrene	mg/kg	0.081	6655917	<0.020	0.080	0.064	0.020	6658664
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	6655917	<0.050	<0.050	<0.050	0.050	6658664
Dibenz(a,h)anthracene	mg/kg	<0.050	6655917	<0.050	<0.050	<0.050	0.050	6658664
Benzo(g,h,i)perylene	mg/kg	<0.050	6655917	<0.050	0.058	0.052	0.050	6658664
Low Molecular Weight PAH`s	mg/kg		6640760	<0.050	0.29	0.15	0.050	6640760
High Molecular Weight PAH`s	mg/kg		6640760	0.12	0.89	0.70	0.050	6640760
Total PAH	mg/kg		6640760	0.14	1.2	0.85	0.050	6640760
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	94	6655917	108	99	108		6658664
D8-ACENAPHTHYLENE (sur.)	%	93	6655917	101	94	99		6658664
D8-NAPHTHALENE (sur.)	%	98	6655917	105	96	102		6658664
TERPHENYL-D14 (sur.)	%	97	6655917	111	104	111		6658664

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FV7860	FV7861	FV7862	FV7862		
Sampling Date		2013/03/11	2013/03/11	2013/03/11	2013/03/11		
	UNITS	**SP13-171-130311**	**SP13-172-130311**	**SP13-173-130311**	**SP13-173-130311 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	1.2	1.6	3.1		0.10	6642196
Benzo[a]pyrene equivalency	N/A	0.10	0.13	0.23		0.10	6642196
Polycyclic Aromatics							
Naphthalene	mg/kg	0.019	0.043	0.050	0.050	0.010	6658664
2-Methylnaphthalene	mg/kg	<0.020	0.077	<0.020	<0.020	0.020	6658664
Acenaphthylene	mg/kg	0.0081	0.011	0.017	0.017	0.0050	6658664
Acenaphthene	mg/kg	<0.0050	0.011	0.019	0.026	0.0050	6658664
Fluorene	mg/kg	<0.020	<0.020	0.023	0.031	0.020	6658664
Phenanthrene	mg/kg	0.085	0.13	0.25	0.28	0.020	6658664
Anthracene	mg/kg	0.014	0.022	0.059	0.045	0.0040	6658664
Fluoranthene	mg/kg	0.13	0.17	0.43	0.43	0.020	6658664
Pyrene	mg/kg	0.12	0.16	0.36	0.36	0.020	6658664
Benzo(a)anthracene	mg/kg	0.040	0.066	0.12	0.12	0.020	6658664
Chrysene	mg/kg	0.069	0.096	0.20	0.19	0.020	6658664
Benzo(b&j)fluoranthene	mg/kg	0.090	0.13	0.26	0.25	0.020	6658664
Benzo(k)fluoranthene	mg/kg	0.030	0.037	0.067	0.076	0.020	6658664
Benzo(a)pyrene	mg/kg	0.056	0.078	0.15	0.16	0.020	6658664
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	0.099	0.099	0.050	6658664
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6658664
Benzo(g,h,i)perylene	mg/kg	<0.050	0.054	0.11	0.12	0.050	6658664
Low Molecular Weight PAH`s	mg/kg	0.13	0.29	0.41		0.050	6640760
High Molecular Weight PAH`s	mg/kg	0.60	0.87	2.0		0.050	6640760
Total PAH	mg/kg	0.72	1.2	2.4		0.050	6640760
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	102	96	112	110		6658664
D8-ACENAPHTHYLENE (sur.)	%	95	90	102	102		6658664
D8-NAPHTHALENE (sur.)	%	97	91	103	104		6658664
TERPHENYL-D14 (sur.)	%	106	100	114	113		6658664

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV7817		FV7818	FV7819		FV7820		FV7821		
Sampling Date		2013/03/11		2013/03/11	2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-155-130311**	**RDL**	**SP13-156-130311**	**SP13-157-130311**	**RDL**	**SP13-158-130311**	**RDL**	**SP13-159-130311**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	33	10	51	37	10	35	10	33	10	6669299
Soluble Chloride (Cl)	mg/L	17.5	5.0	29.4	36.9	5.0	26.3	5.0	20.1	5.0	6669296
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	9.4	2.7	18.4	22.5	3.1	14.4	2.7	11.6	2.9	6642199
Soluble Sodium (Na)	mg/kg	12.7	2.7	14.3	15.9	3.1	14.0	2.7	9.5	2.9	6642199
Soluble Parameters											
Soluble Conductivity	uS/cm	260	1.0	348	392	1.0	354	1.0	345	1.0	6665777
Soluble pH	pH Units	7.10	N/A	6.99	7.23	N/A	7.12	N/A	7.05	N/A	6665776
Wet Soluble Calcium (Ca)	mg/L	62.4	5.0	63.9	73.4	5.0	62.1	5.0	76.2	5.0	6667097
Saturation %	%	53.6	1.0	62.4	61.0	1.0	54.7	1.0	57.7	1.0	6665774
Wet Soluble Magnesium (Mg)	mg/L	22.8	5.0	14.3	13.1	5.0	13.3	5.0	11.9	5.0	6667097
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	20	<20	20	<20	20	6667097
Wet Soluble Sodium (Na)	mg/L	23.8	5.0	22.9	26.1	5.0	25.6	5.0	16.4	5.0	6667097
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	30	<30	30	<30	30	6667097
Sodium Adsorption Ratio	N/A	0.66	0.10	0.67	0.74	0.10	0.77	0.10	0.46	0.10	6642198

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV7822		FV7823		FV7824		FV7825		
Sampling Date		2013/03/11		2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-160-130311**	**RDL**	**SP13-160-01-130311**	**RDL**	**SP13-161-130311**	**RDL**	**SP13-162-130311**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	34	10	62	10	40	10	30	10	6669299
Soluble Chloride (Cl)	mg/L	18.5	5.0	27.4	5.0	27.5	5.0	22.1	5.0	6669296
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	10.8	2.9	14.7	2.7	15.7	2.9	12.1	2.8	6642199
Soluble Sodium (Na)	mg/kg	11.5	2.9	14.1	2.7	14.0	2.9	12.1	2.8	6642199
Soluble Parameters										
Soluble Conductivity	uS/cm	331	1.0	345	1.0	388	1.0	360	1.0	6665777
Soluble pH	pH Units	6.59	N/A	6.41	N/A	6.85	N/A	6.81	N/A	6665776
Wet Soluble Calcium (Ca)	mg/L	63.4	5.0	49.9	5.0	77.8	5.0	72.8	5.0	6667097
Saturation %	%	58.4	1.0	53.7	1.0	57.3	1.0	55.0	1.0	6665774
Wet Soluble Magnesium (Mg)	mg/L	13.6	5.0	14.9	5.0	15.1	5.0	16.7	5.0	6667097
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6667097
Wet Soluble Sodium (Na)	mg/L	19.6	5.0	26.3	5.0	24.5	5.0	22.0	5.0	6667097
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6667097
Sodium Adsorption Ratio	N/A	0.58	0.10	0.84	0.10	0.67	0.10	0.61	0.10	6642198

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV7826		FV7852		FV7853		FV7854		FV7855		
Sampling Date		2013/03/11		2013/03/11		2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-163-130311**	**RDL**	**SP13-164-130311**	**RDL**	**SP13-165-130311**	**RDL**	**SP13-166-130311**	**RDL**	**SP13-167-130311**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	10	10	41	10	84	10	54	10	56	10	6669299
Soluble Chloride (Cl)	mg/L	38.1	5.0	40.4	5.0	61.7	5.0	30.1	5.0	52.8	5.0	6669296
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	23.8	3.1	24.6	3.0	39.3	3.2	18.9	3.1	33.6	3.2	6642199
Soluble Sodium (Na)	mg/kg	13.4	3.1	17.3	3.0	28.6	3.2	16.7	3.1	22.6	3.2	6642199
Soluble Parameters												
Soluble Conductivity	uS/cm	340	1.0	418	1.0	501	1.0	396	1.0	479	1.0	6665777
Soluble pH	pH Units	6.33	N/A	6.92	N/A	7.14	N/A	6.85	N/A	7.10	N/A	6665776
Wet Soluble Calcium (Ca)	mg/L	49.8	5.0	66.6	5.0	87.5	5.0	72.9	5.0	84.0	5.0	6667097
Saturation %	%	62.5	1.0	60.7	1.0	63.6	1.0	62.7	1.0	63.7	1.0	6665774
Wet Soluble Magnesium (Mg)	mg/L	17.0	5.0	22.6	5.0	18.2	5.0	15.2	5.0	16.8	5.0	6667097
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6667097
Wet Soluble Sodium (Na)	mg/L	21.5	5.0	28.5	5.0	44.9	5.0	26.5	5.0	35.5	5.0	6667097
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	32	30	<30	30	<30	30	6667097
Sodium Adsorption Ratio	N/A	0.67	0.10	0.77	0.10	1.14	0.10	0.74	0.10	0.93	0.10	6642198

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV7856		FV7857		FV7858		FV7859	FV7859		
Sampling Date		2013/03/11		2013/03/11		2013/03/11		2013/03/11	2013/03/11		
	UNITS	**SP13-168-130311**	**RDL**	**SP13-169-130311**	**RDL**	**SP13-170-130311**	**RDL**	**SP13-170-01-130311**	**SP13-170-01-130311 Lab-Dup**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	12	10	31	10	80	10	67	67	10	6669299
Soluble Chloride (Cl)	mg/L	19.9	5.0	22.5	5.0	39.4	5.0	44.2	40.1	5.0	6669296
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	11.2	2.8	11.7	2.6	21.4	2.7	32.9		3.7	6642199
Soluble Sodium (Na)	mg/kg	9.9	2.8	11.4	2.6	23.0	2.7	44.3		3.7	6642199
Soluble Parameters											
Soluble Conductivity	uS/cm	264	1.0	343	1.0	446	1.0	480	483	1.0	6665777
Soluble pH	pH Units	6.30	N/A	7.03	N/A	7.18	N/A	7.25	7.26	N/A	6665776
Wet Soluble Calcium (Ca)	mg/L	40.7	5.0	57.6	5.0	73.6	5.0	79.5	83.0	5.0	6667097
Saturation %	%	56.5	1.0	52.0	1.0	54.3	1.0	74.3	74.7	1.0	6665774
Wet Soluble Magnesium (Mg)	mg/L	14.2	5.0	16.2	5.0	18.8	5.0	19.9	19.5	5.0	6667097
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6667097
Wet Soluble Sodium (Na)	mg/L	17.5	5.0	21.9	5.0	42.5	5.0	59.7	59.8	5.0	6667097
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	32	30	30	<30	30	6667097
Sodium Adsorption Ratio	N/A	0.60	0.10	0.66	0.10	1.14	0.10	1.55		0.10	6642198

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FV7860		FV7861		FV7862		
Sampling Date		2013/03/11		2013/03/11		2013/03/11		
	UNITS	**SP13-171-130311**	**RDL**	**SP13-172-130311**	**QC Batch**	**SP13-173-130311**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	53	10	95	6669299	65	10	6669371
Soluble Chloride (Cl)	mg/L	27.0	5.0	28.0	6669296	21.4	5.0	6669301
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	16.5	3.1	16.4	6642199	12.5	2.9	6642199
Soluble Sodium (Na)	mg/kg	16.9	3.1	20.7	6642199	16.5	2.9	6642199
Soluble Parameters								
Soluble Conductivity	uS/cm	374	1.0	370	6665777	327	1.0	6665848
Soluble pH	pH Units	6.99	N/A	7.34	6665776	7.40	N/A	6665847
Wet Soluble Calcium (Ca)	mg/L	73.4	5.0	64.6	6667097	40.0	5.0	6667210
Saturation %	%	61.3	1.0	58.8	6665774	58.2	1.0	6665832
Wet Soluble Magnesium (Mg)	mg/L	24.7	5.0	24.8	6667097	24.0	5.0	6667210
Wet Soluble Potassium (K)	mg/L	20	20	<20	6667097	<20	20	6667210
Wet Soluble Sodium (Na)	mg/L	27.5	5.0	35.1	6667097	28.3	5.0	6667210
Wet Soluble Sulphur (S)	mg/L	<30	30	34	6667097	<30	30	6667210
Sodium Adsorption Ratio	N/A	0.71	0.10	0.94	6642198	0.87	0.10	6642198

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	5.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6648286	Moisture	2013/03/15					<0.30	%	3.2	20		
6649001	Moisture	2013/03/15					<0.30	%	0.1	20		
6649257	Total Antimony (Sb)	2013/03/15	NC	75 - 125	103	75 - 125	<0.10	mg/kg	4.0	30	88	70 - 130
6649257	Total Arsenic (As)	2013/03/15	98	75 - 125	102	75 - 125	<0.50	mg/kg	2.7	30	95	70 - 130
6649257	Total Barium (Ba)	2013/03/15	NC	75 - 125	104	75 - 125	<0.10	mg/kg	3.8	35	104	70 - 130
6649257	Total Beryllium (Be)	2013/03/15	118	75 - 125	119	75 - 125	<0.40	mg/kg	NC	30		
6649257	Total Cadmium (Cd)	2013/03/15	112	75 - 125	106	75 - 125	<0.050	mg/kg	2.7	30	101	70 - 130
6649257	Total Chromium (Cr)	2013/03/15	NC	75 - 125	105	75 - 125	<1.0	mg/kg	0.1	30	101	70 - 130
6649257	Total Cobalt (Co)	2013/03/15	104	75 - 125	105	75 - 125	<0.30	mg/kg	0.2	30	93	70 - 130
6649257	Total Copper (Cu)	2013/03/15	NC	75 - 125	105	75 - 125	<0.50	mg/kg	2.6	30	88	70 - 130
6649257	Total Lead (Pb)	2013/03/15	NC	75 - 125	107	75 - 125	<0.10	mg/kg	2.6	35	101	70 - 130
6649257	Total Lithium (Li)	2013/03/15	116	75 - 125	106	75 - 125	<5.0	mg/kg	NC	30		
6649257	Total Manganese (Mn)	2013/03/15	NC	75 - 125	108	75 - 125	<0.20	mg/kg	1.9	30	102	70 - 130
6649257	Total Mercury (Hg)	2013/03/15	109	75 - 125	104	75 - 125	<0.050	mg/kg	NC	35	83	70 - 130
6649257	Total Molybdenum (Mo)	2013/03/15	107	75 - 125	103	75 - 125	<0.10	mg/kg	0.8	35	101	70 - 130
6649257	Total Nickel (Ni)	2013/03/15	NC	75 - 125	104	75 - 125	<0.80	mg/kg	2.4	30	91	70 - 130
6649257	Total Selenium (Se)	2013/03/15	117	75 - 125	109	75 - 125	<0.50	mg/kg	NC	30		
6649257	Total Silver (Ag)	2013/03/15	101	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35		
6649257	Total Strontium (Sr)	2013/03/15	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.9	35	104	70 - 130
6649257	Total Thallium (Tl)	2013/03/15	103	75 - 125	101	75 - 125	<0.050	mg/kg	NC	30	86	70 - 130
6649257	Total Tin (Sn)	2013/03/15	100	75 - 125	100	75 - 125	<0.10	mg/kg	0.9	35		
6649257	Total Titanium (Ti)	2013/03/15	NC	75 - 125	105	75 - 125	<1.0	mg/kg	0.7	35	105	70 - 130
6649257	Total Uranium (U)	2013/03/15	111	75 - 125	102	75 - 125	<0.050	mg/kg	5.6	30	93	70 - 130
6649257	Total Vanadium (V)	2013/03/15	NC	75 - 125	101	75 - 125	<2.0	mg/kg	0.3	30	107	70 - 130
6649257	Total Zinc (Zn)	2013/03/15	NC	75 - 125	109	75 - 125	<1.0	mg/kg	1.6	30	93	70 - 130
6649257	Total Aluminum (Al)	2013/03/15					<100	mg/kg	1.9	35	104	70 - 130
6649257	Total Calcium (Ca)	2013/03/15					<100	mg/kg	1.2	30	98	70 - 130
6649257	Total Iron (Fe)	2013/03/15					<100	mg/kg	1.8	30	96	70 - 130
6649257	Total Magnesium (Mg)	2013/03/15					<100	mg/kg	2.6	30	93	70 - 130
6649257	Total Phosphorus (P)	2013/03/15					<10	mg/kg	2.2	30	97	70 - 130
6649257	Total Bismuth (Bi)	2013/03/15					<0.10	mg/kg	NC	30		
6649257	Total Potassium (K)	2013/03/15					<100	mg/kg	1.7	35		
6649257	Total Sodium (Na)	2013/03/15					<100	mg/kg	NC	35		
6649257	Total Zirconium (Zr)	2013/03/15					<0.50	mg/kg	2.2	30		
6649262	Soluble (2:1) pH	2013/03/15			102	96 - 104			0.5	20		
6649272	Total Antimony (Sb)	2013/03/15	111	75 - 125	103	75 - 125	<0.10	mg/kg	3.7	30	86	70 - 130
6649272	Total Arsenic (As)	2013/03/15	118	75 - 125	107	75 - 125	<0.50	mg/kg	0.5	30	100	70 - 130
6649272	Total Barium (Ba)	2013/03/15	NC	75 - 125	107	75 - 125	<0.10	mg/kg	11.3	35	104	70 - 130
6649272	Total Beryllium (Be)	2013/03/15	115	75 - 125	107	75 - 125	<0.40	mg/kg	NC	30		

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6649272	Total Cadmium (Cd)	2013/03/15	124	75 - 125	110	75 - 125	<0.050	mg/kg	NC	30	108	70 - 130
6649272	Total Chromium (Cr)	2013/03/15	113	75 - 125	105	75 - 125	<1.0	mg/kg	9.5	30	99	70 - 130
6649272	Total Cobalt (Co)	2013/03/15	110	75 - 125	104	75 - 125	<0.30	mg/kg	1.1	30	93	70 - 130
6649272	Total Copper (Cu)	2013/03/15	124	75 - 125	111	75 - 125	<0.50	mg/kg	2.9	30	88	70 - 130
6649272	Total Lead (Pb)	2013/03/15	117	75 - 125	108	75 - 125	<0.10	mg/kg	0.1	35	101	70 - 130
6649272	Total Lithium (Li)	2013/03/15	113	75 - 125	104	75 - 125	<5.0	mg/kg				
6649272	Total Manganese (Mn)	2013/03/15	NC	75 - 125	106	75 - 125	<0.20	mg/kg	1.5	30	102	70 - 130
6649272	Total Mercury (Hg)	2013/03/15	119	75 - 125	107	75 - 125	<0.050	mg/kg	NC	35	99	70 - 130
6649272	Total Molybdenum (Mo)	2013/03/15	114	75 - 125	104	75 - 125	<0.10	mg/kg	NC	35	123	70 - 130
6649272	Total Nickel (Ni)	2013/03/15	NC	75 - 125	108	75 - 125	<0.80	mg/kg	1.9	30	97	70 - 130
6649272	Total Selenium (Se)	2013/03/15	122	75 - 125	114	75 - 125	<0.50	mg/kg	NC	30		
6649272	Total Silver (Ag)	2013/03/15	103	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35		
6649272	Total Strontium (Sr)	2013/03/15	119	75 - 125	102	75 - 125	<0.10	mg/kg	2.3	35	105	70 - 130
6649272	Total Thallium (Tl)	2013/03/15	109	75 - 125	102	75 - 125	<0.050	mg/kg	NC	30	88	70 - 130
6649272	Total Tin (Sn)	2013/03/15	107	75 - 125	100	75 - 125	<0.10	mg/kg	NC	35		
6649272	Total Titanium (Ti)	2013/03/15	NC	75 - 125	104	75 - 125	<1.0	mg/kg	8.5	35	106	70 - 130
6649272	Total Uranium (U)	2013/03/15	115	75 - 125	105	75 - 125	<0.050	mg/kg			102	70 - 130
6649272	Total Vanadium (V)	2013/03/15	NC	75 - 125	103	75 - 125	<2.0	mg/kg	4.8	30	105	70 - 130
6649272	Total Zinc (Zn)	2013/03/15	NC	75 - 125	114	75 - 125	<1.0	mg/kg	3.2	30	93	70 - 130
6649272	Total Aluminum (Al)	2013/03/15					<100	mg/kg	0.5	35	106	70 - 130
6649272	Total Calcium (Ca)	2013/03/15					<100	mg/kg	5.0	30	95	70 - 130
6649272	Total Iron (Fe)	2013/03/15					<100	mg/kg	0.4	30	96	70 - 130
6649272	Total Magnesium (Mg)	2013/03/15					<100	mg/kg	2.0	30	95	70 - 130
6649272	Total Phosphorus (P)	2013/03/15					<10	mg/kg	4.2	30	96	70 - 130
6649272	Total Bismuth (Bi)	2013/03/15					<0.10	mg/kg	NC	30		
6649272	Total Potassium (K)	2013/03/15					<100	mg/kg	NC	35		
6649272	Total Sodium (Na)	2013/03/15					<100	mg/kg	NC	35		
6649272	Total Zirconium (Zr)	2013/03/15					<0.50	mg/kg	0.06	30		
6649277	Soluble (2:1) pH	2013/03/15			102	96 - 104			2.1	20		
6650024	Moisture	2013/03/16					<0.30	%	7.6	20		
6652059	200 mesh (>.075 mm)	2013/03/15							9.0	35		
6652059	200 mesh (<.075 mm)	2013/03/15							1.7	35		
6654019	1,4-Difluorobenzene (sur.)	2013/03/16	117	70 - 130	97	70 - 130	99	%				
6654019	4-BROMOFLUOROBENZENE (sur.)	2013/03/16	129	70 - 130	99	70 - 130	110	%				
6654019	D10-ETHYLBENZENE (sur.)	2013/03/16	98	50 - 130	75	50 - 130	88	%				
6654019	D4-1,2-DICHLOROETHANE (sur.)	2013/03/16	100	70 - 130	97	70 - 130	92	%				
6654019	Benzene	2013/03/18	102	60 - 140	87	60 - 140	<0.0050	mg/kg	NC (1)	40		
6654019	Toluene	2013/03/18	106	60 - 140	116	60 - 140	<0.020	mg/kg	36.9 (2)	40		
6654019	Ethylbenzene	2013/03/18	109	60 - 140	84	60 - 140	<0.010	mg/kg	18.3 (2)	40		

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6654019	m & p-Xylene	2013/03/18	111	60 - 140	82	60 - 140	<0.040	mg/kg	16.6(2)	40		
6654019	o-Xylene	2013/03/18	122	60 - 140	88	60 - 140	<0.040	mg/kg	35.3(2)	40		
6654019	(C6-C10)	2013/03/16			102	60 - 140	<10	mg/kg				
6654019	Methyl-tert-butylether(MTBE)	2013/03/16					<0.10	mg/kg				
6654019	Styrene	2013/03/18					<0.030	mg/kg	NC(2)	40		
6654019	Xylenes (Total)	2013/03/18					<0.040	mg/kg	25.2	40		
6655917	D10-ANTHRACENE (sur.)	2013/03/16	88	60 - 130	89	60 - 130	98	%				
6655917	D8-ACENAPHTHYLENE (sur.)	2013/03/16	87	50 - 130	89	50 - 130	95	%				
6655917	D8-NAPHTHALENE (sur.)	2013/03/16	90	50 - 130	93	50 - 130	101	%				
6655917	TERPHENYL-D14 (sur.)	2013/03/16	91	60 - 130	90	60 - 130	99	%				
6655917	Naphthalene	2013/03/16	75	50 - 130	86	50 - 130	<0.010	mg/kg	NC	50		
6655917	2-Methylnaphthalene	2013/03/16	75	50 - 130	84	50 - 130	<0.020	mg/kg	NC	50		
6655917	Acenaphthylene	2013/03/16	75	50 - 130	84	50 - 130	<0.0050	mg/kg	NC	50		
6655917	Acenaphthene	2013/03/16	77	50 - 130	86	50 - 130	<0.0050	mg/kg	NC	50		
6655917	Fluorene	2013/03/16	77	50 - 130	85	50 - 130	<0.020	mg/kg	NC	50		
6655917	Phenanthrene	2013/03/16	66	60 - 130	84	60 - 130	<0.020	mg/kg	66.1(3)	50		
6655917	Anthracene	2013/03/16	74	60 - 130	83	60 - 130	<0.0040	mg/kg	48.7	50		
6655917	Fluoranthene	2013/03/16	50(3)	60 - 130	83	60 - 130	<0.020	mg/kg	117(3)	50		
6655917	Pyrene	2013/03/16	56(3)	60 - 130	80	60 - 130	<0.020	mg/kg	104(3)	50		
6655917	Benzo(a)anthracene	2013/03/16	65	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
6655917	Chrysene	2013/03/16	63	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
6655917	Benzo(b&j)fluoranthene	2013/03/16	56(3)	60 - 130	80	60 - 130	<0.020	mg/kg	104(3)	50		
6655917	Benzo(k)fluoranthene	2013/03/16	72	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
6655917	Benzo(a)pyrene	2013/03/16	67	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
6655917	Indeno(1,2,3-cd)pyrene	2013/03/16	63	60 - 130	72	60 - 130	<0.050	mg/kg	NC	50		
6655917	Dibenz(a,h)anthracene	2013/03/16	66	60 - 130	71	60 - 130	<0.050	mg/kg	NC	50		
6655917	Benzo(g,h,i)perylene	2013/03/16	56(3)	60 - 130	65	60 - 130	<0.050	mg/kg	NC	50		
6658664	D10-ANTHRACENE (sur.)	2013/03/18	104	60 - 130	101	60 - 130	99	%				
6658664	D8-ACENAPHTHYLENE (sur.)	2013/03/18	100	50 - 130	92	50 - 130	88	%				
6658664	D8-NAPHTHALENE (sur.)	2013/03/18	98	50 - 130	95	50 - 130	90	%				
6658664	TERPHENYL-D14 (sur.)	2013/03/18	109	60 - 130	101	60 - 130	97	%				
6658664	Naphthalene	2013/03/19	92	50 - 130	91	50 - 130	<0.010	mg/kg	NC	50		
6658664	2-Methylnaphthalene	2013/03/19	91	50 - 130	87	50 - 130	<0.020	mg/kg	NC	50		
6658664	Acenaphthylene	2013/03/19	94	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
6658664	Acenaphthene	2013/03/19	99	50 - 130	95	50 - 130	<0.0050	mg/kg	NC	50		
6658664	Fluorene	2013/03/19	97	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6658664	Phenanthrene	2013/03/19	95	60 - 130	90	60 - 130	<0.020	mg/kg	14.1	50		
6658664	Anthracene	2013/03/19	103	60 - 130	103	60 - 130	<0.0040	mg/kg	26.8	50		
6658664	Fluoranthene	2013/03/19	99	60 - 130	96	60 - 130	<0.020	mg/kg	0.6	50		

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6658664	Pyrene	2013/03/19	98	60 - 130	96	60 - 130	<0.020	mg/kg	0.7	50		
6658664	Benzo(a)anthracene	2013/03/19	87	60 - 130	87	60 - 130	<0.020	mg/kg	3.7	50		
6658664	Chrysene	2013/03/19	85	60 - 130	89	60 - 130	<0.020	mg/kg	7.4	50		
6658664	Benzo(b&j)fluoranthene	2013/03/19	95	60 - 130	89	60 - 130	<0.020	mg/kg	5.4	50		
6658664	Benzo(k)fluoranthene	2013/03/19	91	60 - 130	83	60 - 130	<0.020	mg/kg	NC	50		
6658664	Benzo(a)pyrene	2013/03/19	96	60 - 130	90	60 - 130	<0.020	mg/kg	3.9	50		
6658664	Indeno(1,2,3-cd)pyrene	2013/03/19	94	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6658664	Dibenz(a,h)anthracene	2013/03/19	94	60 - 130	84	60 - 130	<0.050	mg/kg	NC	50		
6658664	Benzo(g,h,i)perylene	2013/03/19	91	60 - 130	83	60 - 130	<0.050	mg/kg	NC	50		
6661593	O-TERPHENYL (sur.)	2013/03/19	89	50 - 130	90	50 - 130	90	%				
6661593	F2 (C10-C16 Hydrocarbons)	2013/03/19	83	50 - 130	83	80 - 120	<10	mg/kg	NC	40		
6661593	F3 (C16-C34 Hydrocarbons)	2013/03/19	90	50 - 130	87	80 - 120	<10	mg/kg	15.6	40		
6661593	F4 (C34-C50 Hydrocarbons)	2013/03/19	88	50 - 130	88	80 - 120	<10	mg/kg	NC	40		
6661593	Reached Baseline at C50	2013/03/19							NC	50		
6663347	O-TERPHENYL (sur.)	2013/03/19	103	50 - 130	111	50 - 130	111	%				
6663347	EPH (C10-C19)	2013/03/19	106	50 - 130	106	50 - 130	<100	mg/kg	NC	40		
6663347	EPH (C19-C32)	2013/03/19	94	50 - 130	94	50 - 130	<100	mg/kg	NC	40		
6665774	Saturation %	2013/03/20			103	80 - 120	<1.0	%	0.6	30		
6665776	Soluble pH	2013/03/20			103	97 - 103			0.1	20		
6665777	Soluble Conductivity	2013/03/20			96	70 - 130	<1.0	uS/cm	0.6	35		
6665832	Saturation %	2013/03/20			103	80 - 120	<1.0	%	1.5	30		
6665847	Soluble pH	2013/03/20			103	97 - 103			0	20		
6665848	Soluble Conductivity	2013/03/20			97	70 - 130	<1.0	uS/cm	1.4	35		
6667097	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	4.4	30		
6667097	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6667097	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6667097	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	0.3	30		
6667097	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6667210	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	0.2	30		
6667210	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6667210	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6669296	Soluble Chloride (Cl)	2013/03/20					<5.0	mg/L	9.7	30		
6669299	Soluble Sulphate (SO4)	2013/03/20					<10	mg/L	0.2	30		

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Maxxam Job #: B319341
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6669301	Soluble Chloride (Cl)	2013/03/20					<5.0	mg/L	NC	30		
6669371	Soluble Sulphate (SO4)	2013/03/20					<10	mg/L	0.2	30		

N/A = Not Applicable
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample matrix interference. Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(2) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(3) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B319341	554272
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V8Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#554272-07-01	Kim Dominic
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	A.E.		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FV7817	SP13-155-130311	13-03-11		Soil				X	X			X				2	
2	FV7818	SP13-156-130311							X	X			X					
3	FV7819	SP13-157-130311							X	X			X					
4	FV7820	SP13-158-130311					X	X	X	X	X		X					
5	FV7821	SP13-159-130311							X	X			X					
6	FV7822	SP13-160-130311							X	X		X	X					B319341
7	FV7823	SP13-160-01-130311							X	X			X					
8	FV7824	SP13-161-130311							X	X			X					
9	FV7825	SP13-162-130311							X	X			X					
10	FV7826	SP13-163-130311							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/11	17:40	[illegible]	2013/03/12	08:00		[ ]	5.6	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
#606 Canada Way, Burnaby, British Columbia Canada V5G 1K5. Tel:(604) 734 7276. Toll-free (800) 665 8566. Fax:(604) 630 0110. www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 354772
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250152		
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #: C#354772-08-01	PROJECT MANAGER: Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	M.E.		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

TURNAROUND TIME (TAT) REQUIRED:

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Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

ANALYSIS REQUESTED (Please be specific)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FU7852	SP13-164-130311							X	X			X				2	
2	FU7853	SP13-165-130311							X	X			X					
3	FU7854	SP13-166-130311							X	X			X					
4	FU7855	SP13-167-130311							X	X			X					
5	FU7856	SP13-168-130311							X	X			X					
6	FU7857	SP13-169-130311							X	X			X					
7	FU7858	SP13-170-130311							X	X			X					B319341
8	FU7859	SP13-170-01-130311							X	X			X					
9	FU7860	SP13-171-130311							X	X			X					
10	FU7861	SP13-172-130311							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MEdwards / Mark Edwards	13/03/11	17:40	[illegible]	2013/03/12	08:00		[ ]	5.5, 6	[✓] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 633 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#354772-09-01	Kim Dominic
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	M.E		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

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1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
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	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FV7962	SP13-173-130311	13-03-11		Soil				X	X			X				2	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

B319341

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Mark Edwards / MARK EDWARDS	13/03/11	17:40	[illegible]	2013/03/12	08:00		[ ]	5,5,6	[✓] Yes [ ] No

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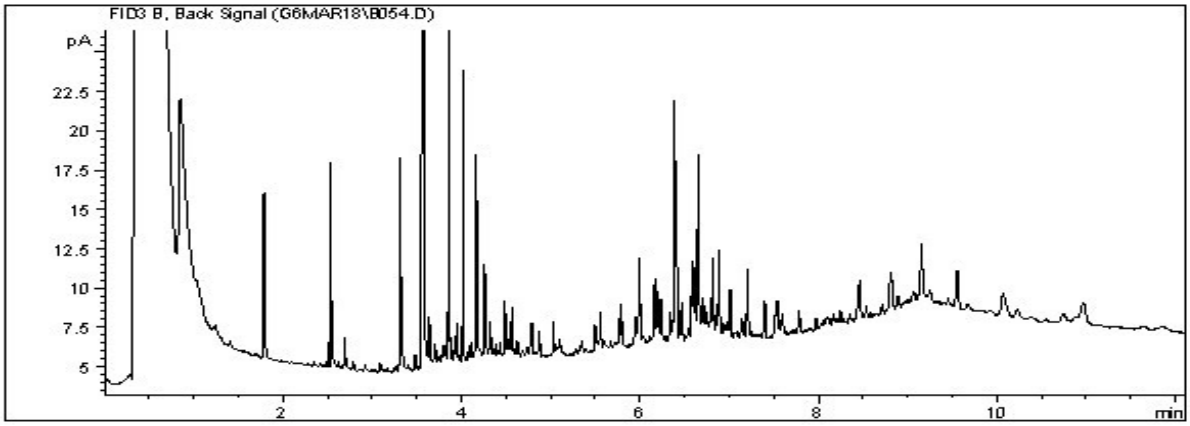
White: Maxxam Yellow: Client

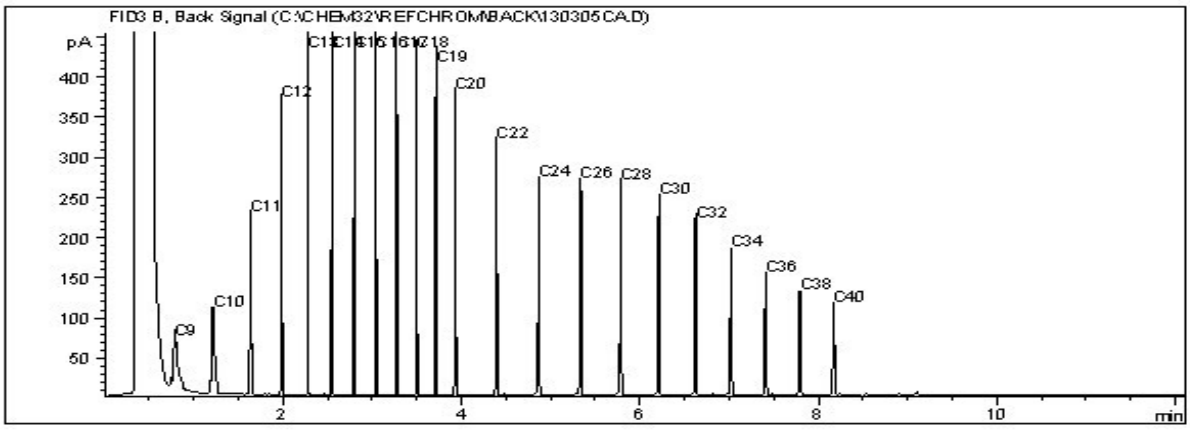
Report Date: 2013/03/20
Maxxam Job #: B319341
Maxxam Sample: FV7820

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-158-130311

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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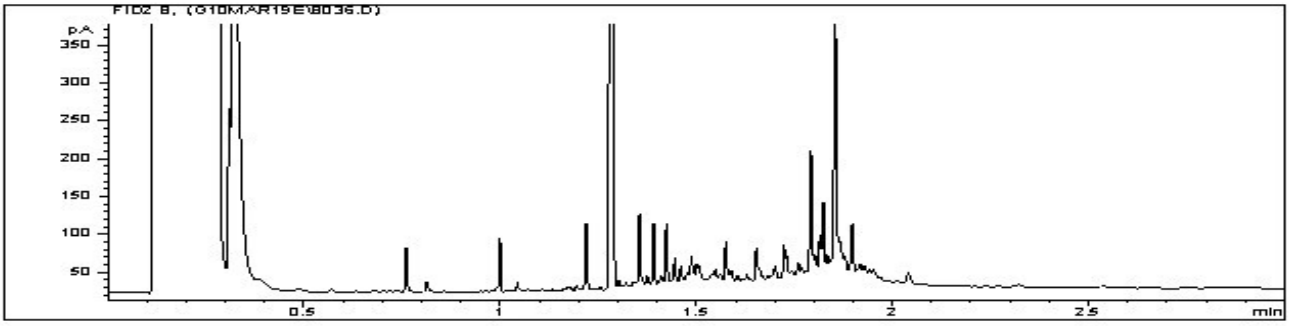
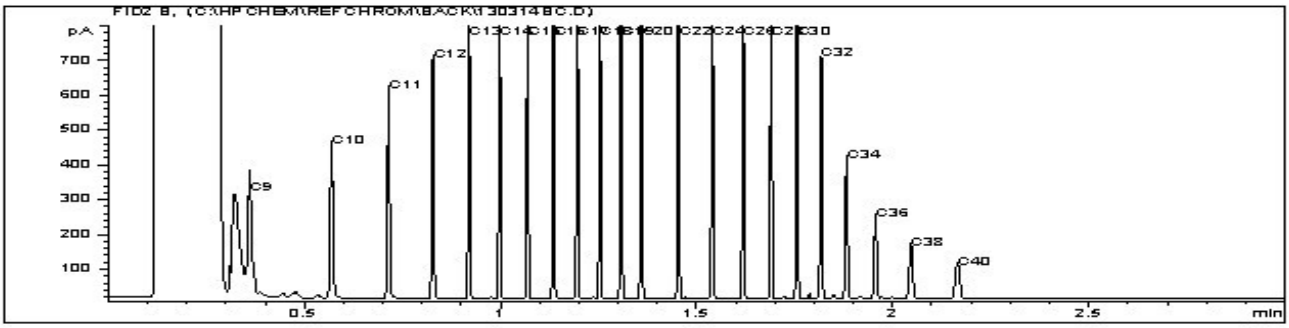
Report Date: 2013/03/20
Maxxam Job #: B319341
Maxxam Sample: FV7820

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-158-130311

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35477210

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B319912
Received: 2013/03/13, 08:00

Sample Matrix: Soil
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00029	SM-2510 B
Elements by ICPMS (total)	5	2013/03/15	2013/03/18	BBY7SOP-00001	EPA 6020A
Moisture	5	N/A	2013/03/15	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	5	2013/03/14	2013/03/20	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	5	N/A	2013/03/20	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	5	N/A	2013/03/20	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	5	2013/03/19	2013/03/19	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	5	N/A	2013/03/18		
Saturated Paste	5	2013/03/19	2013/03/20	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	5	N/A	2013/03/20		
Sulphate (soluble) (soil)	5	2013/03/19	2013/03/20	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	5	N/A	2013/03/20	BBY7SOP-00002	EPA 6020A

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Success Through Science®

Maxxam Job #: B319912
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PHYSICAL TESTING (SOIL)

Maxxam ID		FW1949		FW1950	FW1951	FW1952	FW1953		
Sampling Date		2013/03/12		2013/03/12	2013/03/12	2013/03/12	2013/03/12		
	UNITS	**SP13-174-130312**	**QC Batch**	**SP13-175-130312**	**SP13-176-130312**	**SP13-177-130312**	**SP13-178-130312**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	19	6649837	18	19	20	21	0.30	6649001

RDL = Reportable Detection Limit

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Maxxam Job #: B319912
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW1949	FW1950	FW1951	FW1952	FW1953		
Sampling Date		2013/03/12	2013/03/12	2013/03/12	2013/03/12	2013/03/12		
	UNITS	**SP13-174-130312**	**SP13-175-130312**	**SP13-176-130312**	**SP13-177-130312**	**SP13-178-130312**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.74	7.67	7.69	7.81	7.82	0.010	6653609
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	21100	18900	19300	19700	20200	100	6653583
Total Antimony (Sb)	mg/kg	8.63	4.58	2.90	7.68	7.32	0.10	6653583
Total Arsenic (As)	mg/kg	20.6	17.2	10.9	20.7	22.8	0.50	6653583
Total Barium (Ba)	mg/kg	87.7	79.8	79.6	81.8	83.4	0.10	6653583
Total Beryllium (Be)	mg/kg	0.51	<0.40	<0.40	<0.40	0.41	0.40	6653583
Total Bismuth (Bi)	mg/kg	0.12	0.12	<0.10	<0.10	0.13	0.10	6653583
Total Cadmium (Cd)	mg/kg	0.457	0.474	0.422	0.453	0.574	0.050	6653583
Total Calcium (Ca)	mg/kg	11400	9530	10400	12000	12600	100	6653583
Total Chromium (Cr)	mg/kg	36.3	32.7	33.8	34.2	35.4	1.0	6653583
Total Cobalt (Co)	mg/kg	13.4	11.6	12.1	12.7	12.1	0.30	6653583
Total Copper (Cu)	mg/kg	68.5	65.0	58.2	66.7	64.2	0.50	6653583
Total Iron (Fe)	mg/kg	29300	27100	28000	28100	28600	100	6653583
Total Lead (Pb)	mg/kg	56.2	42.4	31.7	44.7	52.4	0.10	6653583
Total Lithium (Li)	mg/kg	17.6	15.1	15.4	16.1	17.1	5.0	6653583
Total Magnesium (Mg)	mg/kg	8640	7950	8130	7880	8430	100	6653583
Total Manganese (Mn)	mg/kg	546	508	528	507	489	0.20	6653583
Total Mercury (Hg)	mg/kg	0.201	0.439	0.187	0.344	0.310	0.050	6653583
Total Molybdenum (Mo)	mg/kg	1.54	2.07	1.29	1.76	2.27	0.10	6653583
Total Nickel (Ni)	mg/kg	30.3	26.9	28.9	29.3	29.2	0.80	6653583
Total Phosphorus (P)	mg/kg	708	701	682	658	743	10	6653583
Total Potassium (K)	mg/kg	1190	1010	967	1100	1120	100	6653583
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6653583
Total Silver (Ag)	mg/kg	0.101	0.103	0.096	0.096	0.118	0.050	6653583
Total Sodium (Na)	mg/kg	393	462	439	506	585	100	6653583
Total Strontium (Sr)	mg/kg	81.0	60.5	65.8	73.1	81.6	0.10	6653583
Total Thallium (Tl)	mg/kg	0.087	0.093	0.076	0.086	0.103	0.050	6653583
Total Tin (Sn)	mg/kg	2.55	2.63	1.64	2.47	2.68	0.10	6653583
Total Titanium (Ti)	mg/kg	1080	930	888	876	990	1.0	6653583
Total Uranium (U)	mg/kg	0.816	0.834	0.766	0.747	0.899	0.050	6653583
Total Vanadium (V)	mg/kg	74.6	67.4	69.9	68.6	69.8	2.0	6653583
Total Zinc (Zn)	mg/kg	177	194	130	176	170	1.0	6653583
Total Zirconium (Zr)	mg/kg	3.90	3.88	3.97	4.11	3.80	0.50	6653583

RDL = Reportable Detection Limit

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Maxxam Job #: B319912
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW1949	FW1950	FW1951	FW1952	FW1953		
Sampling Date		2013/03/12	2013/03/12	2013/03/12	2013/03/12	2013/03/12		
	UNITS	**SP13-174-130312**	**SP13-175-130312**	**SP13-176-130312**	**SP13-177-130312**	**SP13-178-130312**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	3.0	2.2	1.8	2.6	1.9	0.10	6645411
Benzo[a]pyrene equivalency	N/A	0.23	0.17	0.14	0.20	0.15	0.10	6645411
Polycyclic Aromatics								
Naphthalene	mg/kg	0.045	0.033	0.037	0.046	0.027	0.010	6663577
2-Methylnaphthalene	mg/kg	0.031	<0.020	<0.020	0.025	<0.020	0.020	6663577
Acenaphthylene	mg/kg	0.016	0.010	0.0076	0.013	0.012	0.0050	6663577
Acenaphthene	mg/kg	0.023	0.014	0.016	0.024	0.020	0.0050	6663577
Fluorene	mg/kg	0.024	<0.020	<0.020	0.024	0.023	0.020	6663577
Phenanthrene	mg/kg	0.23	0.17	0.17	0.20	0.17	0.020	6663577
Anthracene	mg/kg	0.036	0.025	0.022	0.030	0.031	0.0040	6663577
Fluoranthene	mg/kg	0.38	0.27	0.24	0.28	0.24	0.020	6663577
Pyrene	mg/kg	0.35	0.25	0.22	0.28	0.23	0.020	6663577
Benzo(a)anthracene	mg/kg	0.12	0.076	0.063	0.097	0.081	0.020	6663577
Chrysene	mg/kg	0.19	0.13	0.11	0.16	0.12	0.020	6663577
Benzo(b&j)fluoranthene	mg/kg	0.25	0.18	0.15	0.22	0.15	0.020	6663577
Benzo(k)fluoranthene	mg/kg	0.074	0.053	0.045	0.064	0.044	0.020	6663577
Benzo(a)pyrene	mg/kg	0.15	0.10	0.086	0.12	0.090	0.020	6663577
Indeno(1,2,3-cd)pyrene	mg/kg	0.096	0.072	0.057	0.087	0.059	0.050	6663577
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6663577
Benzo(g,h,i)perylene	mg/kg	0.11	0.081	0.066	0.096	0.068	0.050	6663577
Low Molecular Weight PAH`s	mg/kg	0.40	0.25	0.25	0.36	0.28	0.050	6645412
High Molecular Weight PAH`s	mg/kg	1.9	1.3	1.1	1.6	1.2	0.050	6645412
Total PAH	mg/kg	2.3	1.6	1.4	1.9	1.5	0.050	6645412
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	98	107	87	97	100		6663577
D8-ACENAPHTHYLENE (sur.)	%	96	97	79	90	89		6663577
D8-NAPHTHALENE (sur.)	%	99	102	85	96	96		6663577
TERPHENYL-D14 (sur.)	%	103	110	91	102	106		6663577

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B319912
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW1949		FW1950		FW1951		FW1952	FW1953		
Sampling Date		2013/03/12		2013/03/12		2013/03/12		2013/03/12	2013/03/12		
	UNITS	**SP13-174-130312**	**RDL**	**SP13-175-130312**	**RDL**	**SP13-176-130312**	**RDL**	**SP13-177-130312**	**SP13-178-130312**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	119	10	162	10	158	10	164	221	10	6669371
Soluble Chloride (Cl)	mg/L	22.0	5.0	102	5.0	87.4	5.0	103	157	5.0	6669301
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	10.9	2.5	49.6	2.4	40.5	2.3	51.4	76.8	2.5	6648141
Soluble Sodium (Na)	mg/kg	16.5	2.5	40.5	2.4	34.9	2.3	47.6	71.5	2.5	6648141
Soluble Parameters											
Soluble Conductivity	uS/cm	501	1.0	810	1.0	739	1.0	821	1070	1.0	6665848
Soluble pH	pH Units	7.37	N/A	7.32	N/A	7.20	N/A	7.43	7.44	N/A	6665847
Wet Soluble Calcium (Ca)	mg/L	74.7	5.0	82.9	5.0	81.4	5.0	81.7	88.2	5.0	6667210
Saturation %	%	49.6	1.0	48.5	1.0	46.3	1.0	49.8	49.0	1.0	6665832
Wet Soluble Magnesium (Mg)	mg/L	22.4	5.0	25.0	5.0	26.7	5.0	29.3	27.7	5.0	6667210
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6667210
Wet Soluble Sodium (Na)	mg/L	33.3	5.0	83.5	5.0	75.2	5.0	95.5	146	5.0	6667210
Wet Soluble Sulphur (S)	mg/L	40	30	64	30	63	30	68	94	30	6667210
Sodium Adsorption Ratio	N/A	0.87	0.10	2.07	0.10	1.85	0.10	2.31	3.47	0.10	6648140

N/A = Not Applicable
RDL = Reportable Detection Limit

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Package 1	2.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6649001	Moisture	2013/03/15					<0.30	%	0.1	20		
6649837	Moisture	2013/03/15					<0.30	%	0.7	20		
6653583	Total Antimony (Sb)	2013/03/18	101	75 - 125	106	75 - 125	<0.10	mg/kg	1.8	30	95	70 - 130
6653583	Total Arsenic (As)	2013/03/18	102	75 - 125	97	75 - 125	0.62, RDL=0.50	mg/kg	1.1	30	100	70 - 130
6653583	Total Barium (Ba)	2013/03/18	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.7	35	98	70 - 130
6653583	Total Beryllium (Be)	2013/03/18	119	75 - 125	103	75 - 125	<0.40	mg/kg	NC	30		
6653583	Total Cadmium (Cd)	2013/03/18	113	75 - 125	103	75 - 125	<0.050	mg/kg	10.9	30	102	70 - 130
6653583	Total Chromium (Cr)	2013/03/18	NC	75 - 125	102	75 - 125	<1.0	mg/kg	3.4	30	98	70 - 130
6653583	Total Cobalt (Co)	2013/03/18	101	75 - 125	103	75 - 125	<0.30	mg/kg	4.8	30	92	70 - 130
6653583	Total Copper (Cu)	2013/03/18	NC	75 - 125	104	75 - 125	<0.50	mg/kg	1.1	30	90	70 - 130
6653583	Total Lead (Pb)	2013/03/18	107	75 - 125	107	75 - 125	<0.10	mg/kg	3.9	35	96	70 - 130
6653583	Total Lithium (Li)	2013/03/18	109	75 - 125	102	75 - 125	<5.0	mg/kg	NC	30		
6653583	Total Manganese (Mn)	2013/03/18	NC	75 - 125	102	75 - 125	<0.20	mg/kg	2.9	30	96	70 - 130
6653583	Total Mercury (Hg)	2013/03/18	117	75 - 125	108	75 - 125	<0.050	mg/kg	NC	35	85	70 - 130
6653583	Total Molybdenum (Mo)	2013/03/18	112	75 - 125	108	75 - 125	<0.10	mg/kg	3.9	35	97	70 - 130
6653583	Total Nickel (Ni)	2013/03/18	NC	75 - 125	101	75 - 125	<0.80	mg/kg	1.9	30	90	70 - 130
6653583	Total Selenium (Se)	2013/03/18	114	75 - 125	99	75 - 125	<0.50	mg/kg	NC	30		
6653583	Total Silver (Ag)	2013/03/18	103	75 - 125	97	75 - 125	<0.050	mg/kg	NC	35		
6653583	Total Strontium (Sr)	2013/03/18	NC	75 - 125	99	75 - 125	<0.10	mg/kg	0.5	35	100	70 - 130
6653583	Total Thallium (Tl)	2013/03/18	101	75 - 125	99	75 - 125	<0.050	mg/kg	NC	30	87	70 - 130
6653583	Total Tin (Sn)	2013/03/18	104	75 - 125	103	75 - 125	<0.10	mg/kg	3.0	35		
6653583	Total Titanium (Ti)	2013/03/18	NC	75 - 125	106	75 - 125	<1.0	mg/kg	3.8	35	101	70 - 130
6653583	Total Uranium (U)	2013/03/18	107	75 - 125	106	75 - 125	<0.050	mg/kg	4.7	30	104	70 - 130
6653583	Total Vanadium (V)	2013/03/18	NC	75 - 125	100	75 - 125	<2.0	mg/kg	4.7	30	102	70 - 130
6653583	Total Zinc (Zn)	2013/03/18	NC	75 - 125	102	75 - 125	<1.0	mg/kg	1.8	30	99	70 - 130
6653583	Total Aluminum (Al)	2013/03/18					<100	mg/kg	3.7	35	99	70 - 130
6653583	Total Calcium (Ca)	2013/03/18					<100	mg/kg	2.2	30	92	70 - 130
6653583	Total Iron (Fe)	2013/03/18					<100	mg/kg	3.7	30	92	70 - 130
6653583	Total Magnesium (Mg)	2013/03/18					<100	mg/kg	4.0	30	92	70 - 130
6653583	Total Phosphorus (P)	2013/03/18					<10	mg/kg	2.2	30	95	70 - 130
6653583	Total Bismuth (Bi)	2013/03/18					<0.10	mg/kg	NC	30		
6653583	Total Potassium (K)	2013/03/18					<100	mg/kg	3.9	35		
6653583	Total Sodium (Na)	2013/03/18					<100	mg/kg	NC	35		
6653583	Total Zirconium (Zr)	2013/03/18					<0.50	mg/kg	1.0	30		
6653609	Soluble (2:1) pH	2013/03/19			100	96 - 104			1	20		
6663577	D10-ANTHRACENE (sur.)	2013/03/20	84	60 - 130	91	60 - 130	85	%				
6663577	D8-ACENAPHTHYLENE (sur.)	2013/03/20	81	50 - 130	90	50 - 130	86	%				
6663577	D8-NAPHTHALENE (sur.)	2013/03/20	85	50 - 130	93	50 - 130	91	%				
6663577	TERPHENYL-D14 (sur.)	2013/03/20	87	60 - 130	94	60 - 130	90	%				

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Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6663577	Naphthalene	2013/03/20	84	50 - 130	85	50 - 130	<0.010	mg/kg				
6663577	2-Methylnaphthalene	2013/03/20	82	50 - 130	83	50 - 130	<0.020	mg/kg				
6663577	Acenaphthylene	2013/03/20	86	50 - 130	86	50 - 130	<0.0050	mg/kg				
6663577	Acenaphthene	2013/03/20	89	50 - 130	89	50 - 130	<0.0050	mg/kg				
6663577	Fluorene	2013/03/20	86	50 - 130	86	50 - 130	<0.020	mg/kg				
6663577	Phenanthrene	2013/03/20	86	60 - 130	86	60 - 130	<0.020	mg/kg				
6663577	Anthracene	2013/03/20	87	60 - 130	87	60 - 130	<0.0040	mg/kg				
6663577	Fluoranthene	2013/03/20	91	60 - 130	90	60 - 130	<0.020	mg/kg				
6663577	Pyrene	2013/03/20	92	60 - 130	91	60 - 130	<0.020	mg/kg				
6663577	Benzo(a)anthracene	2013/03/20	82	60 - 130	81	60 - 130	<0.020	mg/kg				
6663577	Chrysene	2013/03/20	90	60 - 130	93	60 - 130	<0.020	mg/kg				
6663577	Benzo(b&j)fluoranthene	2013/03/20	76	60 - 130	84	60 - 130	<0.020	mg/kg				
6663577	Benzo(k)fluoranthene	2013/03/20	82	60 - 130	74	60 - 130	<0.020	mg/kg				
6663577	Benzo(a)pyrene	2013/03/20	81	60 - 130	77	60 - 130	<0.020	mg/kg				
6663577	Indeno(1,2,3-cd)pyrene	2013/03/20	87	60 - 130	81	60 - 130	<0.050	mg/kg				
6663577	Dibenz(a,h)anthracene	2013/03/20	87	60 - 130	82	60 - 130	<0.050	mg/kg				
6663577	Benzo(g,h,i)perylene	2013/03/20	91	60 - 130	85	60 - 130	<0.050	mg/kg				
6665832	Saturation %	2013/03/20			103	80 - 120	<1.0	%	1.5	30		
6665847	Soluble pH	2013/03/20			103	97 - 103			0	20		
6665848	Soluble Conductivity	2013/03/20			97	70 - 130	<1.0	uS/cm	1.4	35		
6667210	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	0.2	30		
6667210	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6667210	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6669301	Soluble Chloride (Cl)	2013/03/20					<5.0	mg/L	NC	30		
6669371	Soluble Sulphate (SO4)	2013/03/20					<10	mg/L	0.2	30		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant

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to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B319912	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-10-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	ME		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FW1949	SP13-174-130312	13-03-12		Soil				X	X			X				2	
2	FW1950	SP13-175-130312	↓		↓				X	X			X				↓	
3	FW1951	SP13-176-130312	↓		↓				X	X			X				↓	
4	FW1952	SP13-177-130312	↓		↓				X	X			X				↓	
5	FW1953	SP13-178-130312	↓		↓				X	X			X				↓	
6																		
7																		
8																		
9																		
10																		

B319912

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/12	12:30	[illegible]	2013/03/13	08:00		[ ]	2.3, 2	[✓] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35477212, 35477211, 35477213

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/21

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B320232
Received: 2013/03/14, 08:00

Sample Matrix: Soil
Samples Received: 23

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/14	2013/03/16	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/14	2013/03/17	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/14	2013/03/19	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/15	2013/03/17	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	23	2013/03/21	2013/03/21	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	23	2013/03/20	2013/03/21	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	1	N/A	2013/03/17	BBY WI-00033	BC MOE Lab Method
Volatile F1-BTEX	2	N/A	2013/03/18	BBY WI-00033	BC MOE Lab Method
Volatile F1-BTEX	1	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	3	2013/03/14	2013/03/21	BBY8SOP-00030	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	1	2013/03/15	2013/03/21	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	23	2013/03/15	2013/03/18	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	2	N/A	2013/03/15	BBY6SOP-00039	Carter SSMA 47.4
Moisture	3	N/A	2013/03/15	BBY8SOP-00017	Ont MOE -E 3139
Moisture	20	N/A	2013/03/16	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	2	2013/03/14	2013/03/20	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	20	2013/03/15	2013/03/20	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/03/15	2013/03/21	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	23	N/A	2013/03/21	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	23	N/A	2013/03/21	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	3	2013/03/18	2013/03/18	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	20	2013/03/19	2013/03/19	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	23	2013/03/20	2013/03/21	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	23	N/A	2013/03/18		
Saturated Paste	23	2013/03/20	2013/03/21	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	23	N/A	2013/03/21		
Sulphate (soluble) (soil)	23	2013/03/21	2013/03/21	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	23	N/A	2013/03/21	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	4	N/A	2013/03/21	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	3	2013/03/14	2013/03/19	BBY8SOP-00029	BC Env Lab Manual
BC Hydrocarbons in Soil by GC/FID	1	2013/03/15	2013/03/19	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

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Your P.O. #: 700250162
Sampler Initials: ME

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FW4750	FW4751	FW4763	FW4770		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-185-130313**	**SP13-186-130313**	**SP13-188-130313**	**SP13-194-130313**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	6663647
F3 (C16-C34 Hydrocarbons)	mg/kg	49	48	92	57	10	6663647
F4 (C34-C50 Hydrocarbons)	mg/kg	38	31	55	53	10	6663647
Reached Baseline at C50	mg/kg	YES	YES	YES	YES	N/A	6663647
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	93	96	119	99		6663647

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FW4751	FW4770		
Sampling Date		2013/03/13	2013/03/13		
	UNITS	**SP13-186-130313**	**SP13-194-130313**	**RDL**	**QC Batch**
Physical Properties					
200 mesh (>.075 mm)	%	48.1	52.1	0.10	6652059
200 mesh (<.075 mm)	%	51.9	47.9	0.10	6652059

PHYSICAL TESTING (SOIL)

Maxxam ID		FW4743	FW4744	FW4745	FW4746	FW4747	FW4748		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-179-130313**	**SP13-180-130313**	**SP13-180-01-130313**	**SP13-181-130313**	**SP13-182-130313**	**SP13-183-130313**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	20	19	18	15	19	19	0.30	6651391

N/A = Not Applicable
RDL = Reportable Detection Limit

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Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PHYSICAL TESTING (SOIL)

Maxxam ID		FW4748	FW4749		FW4750	FW4751		FW4752		
Sampling Date		2013/03/13	2013/03/13		2013/03/13	2013/03/13		2013/03/13		
	UNITS	**SP13-183-130313 Lab-Dup**	**SP13-184-130313**	**QC Batch**	**SP13-185-130313**	**SP13-186-130313**	**QC Batch**	**SP13-187-130313**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	20	20	6651391	21	19	6651204	21	0.30	6651391

Maxxam ID		FW4763	FW4764	FW4765	FW4766	FW4767	FW4768		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-188-130313**	**SP13-189-130313**	**SP13-190-130313**	**SP13-190-01-130313**	**SP13-191-130313**	**SP13-192-130313**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	20	19	27	19	16	20	0.30	6651391

Maxxam ID		FW4769		FW4770		FW4771		
Sampling Date		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-193-130313**	**QC Batch**	**SP13-194-130313**	**QC Batch**	**SP13-195-130313**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	21	6651391	21	6651204	24	0.30	6651391

Maxxam ID		FW4772	FW4776	FW4777	FW4778		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-196-130313**	**SP13-197-130313**	**SP13-198-130313**	**SP13-199-130313**	**RDL**	**QC Batch**
Physical Properties							
Moisture	%	18	19	19	19	0.30	6651391

RDL = Reportable Detection Limit

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FW4750	FW4751	FW4763	FW4770		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-185-130313**	**SP13-186-130313**	**SP13-188-130313**	**SP13-194-130313**	**RDL**	**QC Batch**
Calculated Parameters							
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	<100	<100	100	6648888
HEPH (C19-C32 less PAH)	mg/kg	<100	<100	<100	<100	100	6648888
Hydrocarbons							
EPH (C10-C19)	mg/kg	<100	<100	<100	<100	100	6663666
EPH (C19-C32)	mg/kg	<100	<100	<100	<100	100	6663666
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	86	90	94	87		6663666

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FW4750	FW4750		
Sampling Date		2013/03/13	2013/03/13		
	UNITS	**SP13-185-130313**	**SP13-185-130313 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10		10	6649781
Volatiles					
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	0.10	6656659
Benzene	mg/kg	<0.0050	<0.0050	0.0050	6656659
Toluene	mg/kg	<0.020	<0.020	0.020	6656659
Ethylbenzene	mg/kg	<0.010	<0.010	0.010	6656659
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	6656659
o-Xylene	mg/kg	<0.040	<0.040	0.040	6656659
Styrene	mg/kg	<0.030	<0.030	0.030	6656659
Xylenes (Total)	mg/kg	<0.040	<0.040	0.040	6656659
(C6-C10)	mg/kg	<10	<10	10	6656659
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	96	96		6656659
4-BROMOFLUOROBENZENE (sur.)	%	93	93		6656659
D10-ETHYLBENZENE (sur.)	%	106	113		6656659
D4-1,2-DICHLOROETHANE (sur.)	%	110	108		6656659

RDL = Reportable Detection Limit

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Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FW4751		FW4763		FW4770		
Sampling Date		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-186-130313**	**QC Batch**	**SP13-188-130313**	**QC Batch**	**SP13-194-130313**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	6649781	<10	6649781	<10	10	6649781
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	6654019	<0.10	6656659	<0.10	0.10	6654019
Benzene	mg/kg	<0.0050	6654019	<0.0050	6656659	<0.0050	0.0050	6654019
Toluene	mg/kg	<0.020	6654019	<0.020	6656659	<0.020	0.020	6654019
Ethylbenzene	mg/kg	<0.010	6654019	<0.010	6656659	<0.010	0.010	6654019
m & p-Xylene	mg/kg	<0.040	6654019	<0.040	6656659	<0.040	0.040	6654019
o-Xylene	mg/kg	<0.040	6654019	<0.040	6656659	<0.040	0.040	6654019
Styrene	mg/kg	<0.030	6654019	<0.030	6656659	<0.030	0.030	6654019
Xylenes (Total)	mg/kg	<0.040	6654019	<0.040	6656659	<0.040	0.040	6654019
(C6-C10)	mg/kg	<10	6654019	<10	6656659	<10	10	6654019
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	86	6654019	97	6656659	96		6654019
4-BROMOFLUOROBENZENE (sur.)	%	101	6654019	91	6656659	103		6654019
D10-ETHYLBENZENE (sur.)	%	97	6654019	111	6656659	97		6654019
D4-1,2-DICHLOROETHANE (sur.)	%	87	6654019	110	6656659	100		6654019

RDL = Reportable Detection Limit

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW4743	FW4744	FW4744	FW4745	FW4746	FW4747		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-179-130313**	**SP13-180-130313**	**SP13-180-130313 Lab-Dup**	**SP13-180-01-130313**	**SP13-181-130313**	**SP13-182-130313**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.79	7.90	7.83	7.86	8.01	7.99	0.010	6653619
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18300	19200	18700	19700	18900	19800	100	6653610
Total Antimony (Sb)	mg/kg	15.9	3.70	3.74	7.07	4.66	10.6	0.10	6653610
Total Arsenic (As)	mg/kg	61.4	14.3	14.3	19.5	13.4	21.2	0.50	6653610
Total Barium (Ba)	mg/kg	85.2	76.1	76.9	77.1	83.6	76.0	0.10	6653610
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	6653610
Total Bismuth (Bi)	mg/kg	0.40	0.12	0.11	<0.10	<0.10	0.13	0.10	6653610
Total Cadmium (Cd)	mg/kg	0.767	0.547	0.479	0.466	0.513	0.467	0.050	6653610
Total Calcium (Ca)	mg/kg	10400	11600	11500	10600	13700	10300	100	6653610
Total Chromium (Cr)	mg/kg	32.4	33.3	32.3	34.9	32.4	35.8	1.0	6653610
Total Cobalt (Co)	mg/kg	12.5	12.2	11.7	12.4	12.1	13.6	0.30	6653610
Total Copper (Cu)	mg/kg	104	68.3	67.3	62.8	60.0	68.4	0.50	6653610
Total Iron (Fe)	mg/kg	26400	26800	26300	26400	25600	27000	100	6653610
Total Lead (Pb)	mg/kg	82.1	45.7	45.5	43.8	42.3	43.5	0.10	6653610
Total Lithium (Li)	mg/kg	13.9	15.3	15.7	17.0	16.2	17.1	5.0	6653610
Total Magnesium (Mg)	mg/kg	7690	8540	8410	8530	8220	8780	100	6653610
Total Manganese (Mn)	mg/kg	472	521	501	527	488	503	0.20	6653610
Total Mercury (Hg)	mg/kg	0.321	0.282	0.282	0.208	0.227	0.291	0.050	6653610
Total Molybdenum (Mo)	mg/kg	2.53	1.49	1.49	1.37	1.25	1.26	0.10	6653610
Total Nickel (Ni)	mg/kg	26.4	29.1	29.0	29.5	28.0	30.5	0.80	6653610
Total Phosphorus (P)	mg/kg	757	680	666	671	700	697	10	6653610
Total Potassium (K)	mg/kg	953	1050	1020	1100	1030	1090	100	6653610
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6653610
Total Silver (Ag)	mg/kg	0.147	0.107	0.105	0.096	0.104	0.092	0.050	6653610
Total Sodium (Na)	mg/kg	619	582	599	573	565	622	100	6653610
Total Strontium (Sr)	mg/kg	92.0	90.8	89.5	88.5	110	80.9	0.10	6653610
Total Thallium (Tl)	mg/kg	0.114	0.100	0.091	0.095	0.090	0.092	0.050	6653610
Total Tin (Sn)	mg/kg	4.82	2.31	2.30	2.54	2.05	4.79	0.10	6653610
Total Titanium (Ti)	mg/kg	867	1010	992	987	986	977	1.0	6653610
Total Uranium (U)	mg/kg	1.06	0.779	0.775	0.731	0.746	0.648	0.050	6653610
Total Vanadium (V)	mg/kg	64.8	68.2	67.0	69.9	66.7	70.6	2.0	6653610
Total Zinc (Zn)	mg/kg	720	174	172	155	149	156	1.0	6653610
Total Zirconium (Zr)	mg/kg	3.91	4.12	4.09	3.89	4.15	4.40	0.50	6653610

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW4748	FW4749		FW4750	FW4751		FW4752		
Sampling Date		2013/03/13	2013/03/13		2013/03/13	2013/03/13		2013/03/13		
	UNITS	**SP13-183-130313**	**SP13-184-130313**	**QC Batch**	**SP13-185-130313**	**SP13-186-130313**	**QC Batch**	**SP13-187-130313**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	7.91	7.71	6653619	7.87	7.71	6653582	7.69	0.010	6653619
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	20100	20500	6653610	22200	19500	6653580	20400	100	6653610
Total Antimony (Sb)	mg/kg	3.22	5.41	6653610	6.24	3.98	6653580	2.78	0.10	6653610
Total Arsenic (As)	mg/kg	11.2	19.3	6653610	17.3	12.3	6653580	11.1	0.50	6653610
Total Barium (Ba)	mg/kg	81.7	88.4	6653610	96.6	78.5	6653580	75.8	0.10	6653610
Total Beryllium (Be)	mg/kg	<0.40	<0.40	6653610	0.51	0.41	6653580	<0.40	0.40	6653610
Total Bismuth (Bi)	mg/kg	<0.10	0.17	6653610	0.12	<0.10	6653580	0.10	0.10	6653610
Total Cadmium (Cd)	mg/kg	0.461	0.494	6653610	0.490	0.515	6653580	0.432	0.050	6653610
Total Calcium (Ca)	mg/kg	10400	8210	6653610	11900	9260	6653580	8530	100	6653610
Total Chromium (Cr)	mg/kg	34.0	35.0	6653610	37.6	32.5	6653580	35.1	1.0	6653610
Total Cobalt (Co)	mg/kg	12.7	12.6	6653610	13.5	11.8	6653580	12.5	0.30	6653610
Total Copper (Cu)	mg/kg	63.8	67.3	6653610	69.0	58.7	6653580	56.9	0.50	6653610
Total Iron (Fe)	mg/kg	26800	26600	6653610	30400	27600	6653580	26500	100	6653610
Total Lead (Pb)	mg/kg	33.3	37.4	6653610	42.5	33.2	6653580	32.5	0.10	6653610
Total Lithium (Li)	mg/kg	15.5	15.2	6653610	19.0	16.0	6653580	16.0	5.0	6653610
Total Magnesium (Mg)	mg/kg	8680	8270	6653610	8280	7750	6653580	8520	100	6653610
Total Manganese (Mn)	mg/kg	494	537	6653610	559	509	6653580	540	0.20	6653610
Total Mercury (Hg)	mg/kg	0.198	0.180	6653610	0.217	0.259	6653580	0.164	0.050	6653610
Total Molybdenum (Mo)	mg/kg	1.50	1.61	6653610	1.28	1.43	6653580	1.19	0.10	6653610
Total Nickel (Ni)	mg/kg	29.4	34.7	6653610	31.5	27.4	6653580	28.6	0.80	6653610
Total Phosphorus (P)	mg/kg	688	643	6653610	631	688	6653580	632	10	6653610
Total Potassium (K)	mg/kg	1010	986	6653610	1160	1140	6653580	954	100	6653610
Total Selenium (Se)	mg/kg	<0.50	<0.50	6653610	<0.50	<0.50	6653580	<0.50	0.50	6653610
Total Silver (Ag)	mg/kg	0.094	0.083	6653610	0.116	0.108	6653580	0.094	0.050	6653610
Total Sodium (Na)	mg/kg	494	418	6653610	516	758	6653580	456	100	6653610
Total Strontium (Sr)	mg/kg	75.7	60.6	6653610	79.5	60.7	6653580	62.0	0.10	6653610
Total Thallium (Tl)	mg/kg	0.078	0.082	6653610	0.098	0.095	6653580	0.081	0.050	6653610
Total Tin (Sn)	mg/kg	2.06	2.10	6653610	3.36	1.84	6653580	1.95	0.10	6653610
Total Titanium (Ti)	mg/kg	988	1030	6653610	1050	934	6653580	1030	1.0	6653610
Total Uranium (U)	mg/kg	0.748	0.768	6653610	0.741	0.795	6653580	0.682	0.050	6653610
Total Vanadium (V)	mg/kg	69.1	71.3	6653610	75.7	67.9	6653580	72.1	2.0	6653610
Total Zinc (Zn)	mg/kg	147	191	6653610	175	133	6653580	132	1.0	6653610
Total Zirconium (Zr)	mg/kg	3.98	4.47	6653610	4.65	3.89	6653580	4.02	0.50	6653610

RDL = Reportable Detection Limit

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW4763	FW4764	FW4765	FW4766	FW4767	FW4768		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-188-130313**	**SP13-189-130313**	**SP13-190-130313**	**SP13-190-01-130313**	**SP13-191-130313**	**SP13-192-130313**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.75	7.89	7.80	7.94	7.65	7.75	0.010	6653619
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18700	19700	19500	18900	18600	19900	100	6653610
Total Antimony (Sb)	mg/kg	5.59	5.19	5.20	4.18	3.62	13.0	0.10	6653610
Total Arsenic (As)	mg/kg	14.9	18.8	17.3	15.2	14.4	28.8	0.50	6653610
Total Barium (Ba)	mg/kg	78.9	79.5	78.1	79.8	74.3	76.6	0.10	6653610
Total Beryllium (Be)	mg/kg	<0.40	0.41	<0.40	<0.40	<0.40	<0.40	0.40	6653610
Total Bismuth (Bi)	mg/kg	<0.10	0.11	0.11	0.12	0.11	0.13	0.10	6653610
Total Cadmium (Cd)	mg/kg	0.488	0.506	0.551	0.563	0.476	0.467	0.050	6653610
Total Calcium (Ca)	mg/kg	9260	10500	11200	12300	8370	9380	100	6653610
Total Chromium (Cr)	mg/kg	31.9	33.6	33.1	31.5	29.5	34.6	1.0	6653610
Total Cobalt (Co)	mg/kg	11.2	11.9	12.0	11.7	10.8	13.0	0.30	6653610
Total Copper (Cu)	mg/kg	57.6	61.2	65.7	66.8	57.9	70.5	0.50	6653610
Total Iron (Fe)	mg/kg	25000	26200	26500	25700	24600	27200	100	6653610
Total Lead (Pb)	mg/kg	42.2	45.0	49.9	52.9	36.2	51.1	0.10	6653610
Total Lithium (Li)	mg/kg	14.8	16.6	16.3	15.7	13.2	15.4	5.0	6653610
Total Magnesium (Mg)	mg/kg	7660	8140	8060	8100	7160	8580	100	6653610
Total Manganese (Mn)	mg/kg	496	498	508	487	420	537	0.20	6653610
Total Mercury (Hg)	mg/kg	0.230	0.224	0.209	0.255	0.156	0.174	0.050	6653610
Total Molybdenum (Mo)	mg/kg	1.63	1.90	1.93	1.55	2.04	2.11	0.10	6653610
Total Nickel (Ni)	mg/kg	26.3	28.8	28.5	27.8	23.5	29.0	0.80	6653610
Total Phosphorus (P)	mg/kg	653	686	643	689	534	635	10	6653610
Total Potassium (K)	mg/kg	978	1100	1040	1010	824	970	100	6653610
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6653610
Total Silver (Ag)	mg/kg	0.106	0.083	0.106	0.107	0.091	0.100	0.050	6653610
Total Sodium (Na)	mg/kg	599	496	433	406	442	387	100	6653610
Total Strontium (Sr)	mg/kg	71.3	78.2	97.8	94.6	62.4	70.8	0.10	6653610
Total Thallium (Tl)	mg/kg	0.089	0.096	0.093	0.089	0.076	0.089	0.050	6653610
Total Tin (Sn)	mg/kg	2.12	2.03	2.21	2.09	1.81	3.22	0.10	6653610
Total Titanium (Ti)	mg/kg	924	996	946	975	996	972	1.0	6653610
Total Uranium (U)	mg/kg	0.804	0.753	1.03	0.755	1.09	0.923	0.050	6653610
Total Vanadium (V)	mg/kg	64.2	69.1	68.0	66.4	65.9	68.1	2.0	6653610
Total Zinc (Zn)	mg/kg	151	160	173	157	140	222	1.0	6653610
Total Zirconium (Zr)	mg/kg	3.68	3.98	3.75	3.42	4.12	3.95	0.50	6653610

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW4769		FW4770		FW4771		
Sampling Date		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-193-130313**	**QC Batch**	**SP13-194-130313**	**QC Batch**	**SP13-195-130313**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.49	6653619	7.60	6653582	7.59	0.010	6653619
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	20100	6653610	21100	6653580	21800	100	6653610
Total Antimony (Sb)	mg/kg	2.00	6653610	2.60	6653580	2.43	0.10	6653610
Total Arsenic (As)	mg/kg	9.25	6653610	10.8	6653580	12.3	0.50	6653610
Total Barium (Ba)	mg/kg	79.5	6653610	98.1	6653580	85.6	0.10	6653610
Total Beryllium (Be)	mg/kg	<0.40	6653610	<0.40	6653580	<0.40	0.40	6653610
Total Bismuth (Bi)	mg/kg	<0.10	6653610	<0.10	6653580	0.11	0.10	6653610
Total Cadmium (Cd)	mg/kg	0.486	6653610	0.360	6653580	0.334	0.050	6653610
Total Calcium (Ca)	mg/kg	9810	6653610	9790	6653580	9530	100	6653610
Total Chromium (Cr)	mg/kg	32.0	6653610	31.9	6653580	34.6	1.0	6653610
Total Cobalt (Co)	mg/kg	11.4	6653610	11.7	6653580	11.5	0.30	6653610
Total Copper (Cu)	mg/kg	50.4	6653610	51.1	6653580	62.7	0.50	6653610
Total Iron (Fe)	mg/kg	25700	6653610	27200	6653580	27000	100	6653610
Total Lead (Pb)	mg/kg	32.4	6653610	54.0	6653580	30.4	0.10	6653610
Total Lithium (Li)	mg/kg	14.6	6653610	14.7	6653580	15.8	5.0	6653610
Total Magnesium (Mg)	mg/kg	7590	6653610	8430	6653580	8450	100	6653610
Total Manganese (Mn)	mg/kg	555	6653610	594	6653580	550	0.20	6653610
Total Mercury (Hg)	mg/kg	0.139	6653610	0.133	6653580	0.109	0.050	6653610
Total Molybdenum (Mo)	mg/kg	1.47	6653610	1.54	6653580	1.25	0.10	6653610
Total Nickel (Ni)	mg/kg	27.6	6653610	27.0	6653580	28.0	0.80	6653610
Total Phosphorus (P)	mg/kg	649	6653610	760	6653580	660	10	6653610
Total Potassium (K)	mg/kg	834	6653610	854	6653580	833	100	6653610
Total Selenium (Se)	mg/kg	<0.50	6653610	<0.50	6653580	<0.50	0.50	6653610
Total Silver (Ag)	mg/kg	0.103	6653610	0.110	6653580	0.097	0.050	6653610
Total Sodium (Na)	mg/kg	412	6653610	272	6653580	294	100	6653610
Total Strontium (Sr)	mg/kg	63.0	6653610	62.3	6653580	76.4	0.10	6653610
Total Thallium (Tl)	mg/kg	0.079	6653610	0.078	6653580	0.071	0.050	6653610
Total Tin (Sn)	mg/kg	1.48	6653610	2.91	6653580	1.41	0.10	6653610
Total Titanium (Ti)	mg/kg	979	6653610	906	6653580	975	1.0	6653610
Total Uranium (U)	mg/kg	0.931	6653610	0.833	6653580	0.856	0.050	6653610
Total Vanadium (V)	mg/kg	68.0	6653610	67.5	6653580	73.1	2.0	6653610
Total Zinc (Zn)	mg/kg	116	6653610	134	6653580	131	1.0	6653610
Total Zirconium (Zr)	mg/kg	3.88	6653610	2.95	6653580	3.81	0.50	6653610

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW4772	FW4776	FW4777	FW4778		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-196-130313**	**SP13-197-130313**	**SP13-198-130313**	**SP13-199-130313**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	7.41	7.75	7.80	7.68	0.010	6653619
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	21100	20400	21100	22100	100	6653610
Total Antimony (Sb)	mg/kg	4.35	3.96	4.65	5.67	0.10	6653610
Total Arsenic (As)	mg/kg	10.1	17.5	15.9	18.7	0.50	6653610
Total Barium (Ba)	mg/kg	83.3	80.1	81.4	85.7	0.10	6653610
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	0.44	0.40	6653610
Total Bismuth (Bi)	mg/kg	<0.10	0.12	0.11	0.17	0.10	6653610
Total Cadmium (Cd)	mg/kg	0.273	0.474	0.522	0.470	0.050	6653610
Total Calcium (Ca)	mg/kg	7620	11300	13600	9940	100	6653610
Total Chromium (Cr)	mg/kg	32.5	34.4	34.1	36.5	1.0	6653610
Total Cobalt (Co)	mg/kg	10.8	12.6	12.7	13.6	0.30	6653610
Total Copper (Cu)	mg/kg	41.6	73.0	74.6	89.4	0.50	6653610
Total Iron (Fe)	mg/kg	24000	27900	27500	29800	100	6653610
Total Lead (Pb)	mg/kg	20.7	50.1	50.9	40.2	0.10	6653610
Total Lithium (Li)	mg/kg	13.1	16.6	16.2	17.5	5.0	6653610
Total Magnesium (Mg)	mg/kg	7290	8380	8360	8510	100	6653610
Total Manganese (Mn)	mg/kg	532	535	523	582	0.20	6653610
Total Mercury (Hg)	mg/kg	0.064	0.281	0.229	0.132	0.050	6653610
Total Molybdenum (Mo)	mg/kg	1.86	1.58	1.74	1.24	0.10	6653610
Total Nickel (Ni)	mg/kg	25.0	29.7	28.4	30.8	0.80	6653610
Total Phosphorus (P)	mg/kg	631	684	715	591	10	6653610
Total Potassium (K)	mg/kg	626	985	1030	999	100	6653610
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	0.50	6653610
Total Silver (Ag)	mg/kg	0.081	0.119	0.124	0.099	0.050	6653610
Total Sodium (Na)	mg/kg	241	410	400	330	100	6653610
Total Strontium (Sr)	mg/kg	56.3	85.7	97.9	69.3	0.10	6653610
Total Thallium (Tl)	mg/kg	0.065	0.090	0.089	0.079	0.050	6653610
Total Tin (Sn)	mg/kg	1.63	8.93	2.29	2.46	0.10	6653610
Total Titanium (Ti)	mg/kg	898	986	1070	1100	1.0	6653610
Total Uranium (U)	mg/kg	1.26	0.798	0.828	0.669	0.050	6653610
Total Vanadium (V)	mg/kg	65.6	71.4	73.3	77.6	2.0	6653610
Total Zinc (Zn)	mg/kg	111	175	172	206	1.0	6653610
Total Zirconium (Zr)	mg/kg	3.20	3.60	3.64	4.43	0.50	6653610

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4743	FW4744	FW4745	FW4746	FW4747		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-179-130313**	**SP13-180-130313**	**SP13-180-01-130313**	**SP13-181-130313**	**SP13-182-130313**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	2.2	8.7	2.3	5.0	1.4	0.10	6649786
Benzo[a]pyrene equivalency	N/A	0.17	0.69	0.18	0.37	0.11	0.10	6649786
Polycyclic Aromatics								
Naphthalene	mg/kg	0.031	0.042	0.039	0.086	0.037	0.010	6667055
2-Methylnaphthalene	mg/kg	0.023	0.027	0.025	0.034	0.035	0.020	6667055
Acenaphthylene	mg/kg	0.0087	0.016	0.0089	0.024	0.0066	0.0050	6667055
Acenaphthene	mg/kg	0.015	0.022	0.018	0.029	0.013	0.0050	6667055
Fluorene	mg/kg	<0.020	0.027	<0.020	0.032	<0.020	0.020	6667055
Phenanthrene	mg/kg	0.12	0.36	0.19	0.29	0.13	0.020	6667055
Anthracene	mg/kg	0.029	0.11	0.023	0.061	0.014	0.0040	6667055
Fluoranthene	mg/kg	0.20	0.96	0.31	0.41	0.16	0.020	6667055
Pyrene	mg/kg	0.31	0.87	0.27	0.37	0.15	0.020	6667055
Benzo(a)anthracene	mg/kg	0.072	0.47	0.079	0.17	0.046	0.020	6667055
Chrysene	mg/kg	0.11	0.53	0.14	0.42	0.087	0.020	6667055
Benzo(b&j)fluoranthene	mg/kg	0.18	0.66	0.19	0.42	0.11	0.020	6667055
Benzo(k)fluoranthene	mg/kg	0.055	0.20	0.056	0.13	0.030	0.020	6667055
Benzo(a)pyrene	mg/kg	0.11	0.45	0.11	0.25	0.062	0.020	6667055
Indeno(1,2,3-cd)pyrene	mg/kg	0.060	0.24	0.071	0.17	<0.050	0.050	6667055
Dibenz(a,h)anthracene	mg/kg	<0.050	0.078	<0.050	<0.050	<0.050	0.050	6667055
Benzo(g,h,i)perylene	mg/kg	0.071	0.27	0.083	0.18	<0.050	0.050	6667055
Low Molecular Weight PAH`s	mg/kg	0.23	0.61	0.31	0.56	0.24	0.050	6648887
High Molecular Weight PAH`s	mg/kg	1.3	5.1	1.4	2.8	0.73	0.050	6648887
Total PAH	mg/kg	1.5	5.8	1.7	3.3	0.96	0.050	6648887
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	90	87	91	95	83		6667055
D8-ACENAPHTHYLENE (sur.)	%	81	77	81	84	73		6667055
D8-NAPHTHALENE (sur.)	%	91	85	89	94	80		6667055
TERPHENYL-D14 (sur.)	%	90	87	91	95	84		6667055

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4748	FW4749		FW4750	FW4751		
Sampling Date		2013/03/13	2013/03/13		2013/03/13	2013/03/13		
	UNITS	**SP13-183-130313**	**SP13-184-130313**	**QC Batch**	**SP13-185-130313**	**SP13-186-130313**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	2.4	2.4	6649786	2.4	1.3	0.10	6649786
Benzo[a]pyrene equivalency	N/A	0.18	0.19	6649786	0.18	0.11	0.10	6649786
Polycyclic Aromatics								
Naphthalene	mg/kg	0.050	0.042	6667055	0.040	0.022	0.010	6663577
2-Methylnaphthalene	mg/kg	0.026	0.026	6667055	<0.020	<0.020	0.020	6663577
Acenaphthylene	mg/kg	0.0092	0.012	6667055	0.0093	0.0053	0.0050	6663577
Acenaphthene	mg/kg	0.028	0.016	6667055	0.012	0.0057	0.0050	6663577
Fluorene	mg/kg	0.029	<0.020	6667055	<0.020	<0.020	0.020	6663577
Phenanthrene	mg/kg	0.25	0.15	6667055	0.19	0.10	0.020	6663577
Anthracene	mg/kg	0.044	0.025	6667055	0.023	0.013	0.0040	6663577
Fluoranthene	mg/kg	0.32	0.21	6667055	0.29	0.15	0.020	6663577
Pyrene	mg/kg	0.28	0.20	6667055	0.27	0.16	0.020	6663577
Benzo(a)anthracene	mg/kg	0.095	0.070	6667055	0.077	0.040	0.020	6663577
Chrysene	mg/kg	0.16	0.13	6667055	0.14	0.078	0.020	6663577
Benzo(b&j)fluoranthene	mg/kg	0.20	0.19	6667055	0.19	0.10	0.020	6663577
Benzo(k)fluoranthene	mg/kg	0.055	0.063	6667055	0.064	0.039	0.020	6663577
Benzo(a)pyrene	mg/kg	0.11	0.12	6667055	0.12	0.062	0.020	6663577
Indeno(1,2,3-cd)pyrene	mg/kg	0.075	0.083	6667055	0.071	<0.050	0.050	6663577
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	6667055	<0.050	<0.050	0.050	6663577
Benzo(g,h,i)perylene	mg/kg	0.085	0.091	6667055	0.079	<0.050	0.050	6663577
Low Molecular Weight PAH`s	mg/kg	0.43	0.27	6648887	0.28	0.15	0.050	6648887
High Molecular Weight PAH`s	mg/kg	1.5	1.3	6648887	1.4	0.69	0.050	6648887
Total PAH	mg/kg	1.9	1.6	6648887	1.7	0.84	0.050	6648887
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	92	99	6667055	91	101		6663577
D8-ACENAPHTHYLENE (sur.)	%	81	87	6667055	81	91		6663577
D8-NAPHTHALENE (sur.)	%	89	96	6667055	86	94		6663577
TERPHENYL-D14 (sur.)	%	92	98	6667055	93	102		6663577

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4752	FW4752		FW4763		FW4764		
Sampling Date		2013/03/13	2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-187-130313**	**SP13-187-130313 Lab-Dup**	**QC Batch**	**SP13-188-130313**	**QC Batch**	**SP13-189-130313**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.4		6649786	2.5	6649786	3.2	0.10	6649786
Benzo[a]pyrene equivalency	N/A	0.12		6649786	0.20	6649786	0.24	0.10	6649786
Polycyclic Aromatics									
Naphthalene	mg/kg	0.024	0.031	6667055	0.047	6663577	0.056	0.010	6667055
2-Methylnaphthalene	mg/kg	<0.020	<0.020	6667055	<0.020	6663577	<0.020	0.020	6667055
Acenaphthylene	mg/kg	0.0079	0.0095	6667055	0.012	6663577	0.013	0.0050	6667055
Acenaphthene	mg/kg	0.0096	0.012	6667055	0.022	6663577	0.020	0.0050	6667055
Fluorene	mg/kg	<0.020	<0.020	6667055	0.020	6663577	0.021	0.020	6667055
Phenanthrene	mg/kg	0.11	0.12	6667055	0.20	6663577	0.037	0.020	6667055
Anthracene	mg/kg	0.013	0.022	6667055	0.033	6663577	0.043	0.0040	6667055
Fluoranthene	mg/kg	0.16	0.18	6667055	0.33	6663577	0.61	0.020	6667055
Pyrene	mg/kg	0.14	0.17	6667055	0.33	6663577	0.49	0.020	6667055
Benzo(a)anthracene	mg/kg	0.044	0.056	6667055	0.097	6663577	0.13	0.020	6667055
Chrysene	mg/kg	0.086	0.12	6667055	0.16	6663577	0.21	0.020	6667055
Benzo(b&j)fluoranthene	mg/kg	0.11	0.15	6667055	0.19	6663577	0.26	0.020	6667055
Benzo(k)fluoranthene	mg/kg	0.035	0.045	6667055	0.072	6663577	0.083	0.020	6667055
Benzo(a)pyrene	mg/kg	0.069	0.081	6667055	0.13	6663577	0.16	0.020	6667055
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.054	6667055	0.081	6663577	0.098	0.050	6667055
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	6667055	<0.050	6663577	<0.050	0.050	6667055
Benzo(g,h,i)perylene	mg/kg	<0.050	0.062	6667055	0.085	6663577	0.11	0.050	6667055
Low Molecular Weight PAH`s	mg/kg	0.17		6648887	0.33	6648887	0.19	0.050	6648887
High Molecular Weight PAH`s	mg/kg	0.72		6648887	1.6	6648887	2.3	0.050	6648887
Total PAH	mg/kg	0.88		6648887	1.9	6648887	2.5	0.050	6648887
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	95	95	6667055	107	6663577	104		6667055
D8-ACENAPHTHYLENE (sur.)	%	85	84	6667055	95	6663577	79		6667055
D8-NAPHTHALENE (sur.)	%	90	92	6667055	101	6663577	87		6667055
TERPHENYL-D14 (sur.)	%	94	95	6667055	108	6663577	103		6667055

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4765	FW4766		FW4767		
Sampling Date		2013/03/13	2013/03/13		2013/03/13		
	UNITS	**SP13-190-130313**	**SP13-190-01-130313**	**QC Batch**	**SP13-191-130313**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	3.6	3.7	6649786	0.39	0.10	6649786
Benzo[a]pyrene equivalency	N/A	0.27	0.29	6649786	<0.10	0.10	6649786
Polycyclic Aromatics							
Naphthalene	mg/kg	0.059	0.064	6667055	<0.010	0.010	6663577
2-Methylnaphthalene	mg/kg	0.025	0.045	6667055	<0.020	0.020	6663577
Acenaphthylene	mg/kg	0.012	0.015	6667055	<0.0050	0.0050	6663577
Acenaphthene	mg/kg	0.029	0.031	6667055	<0.0050	0.0050	6663577
Fluorene	mg/kg	0.039	0.028	6667055	<0.020	0.020	6663577
Phenanthrene	mg/kg	0.32	0.35	6667055	0.026	0.020	6663577
Anthracene	mg/kg	0.047	0.034	6667055	<0.0040	0.0040	6663577
Fluoranthene	mg/kg	0.43	0.45	6667055	0.036	0.020	6663577
Pyrene	mg/kg	0.36	0.40	6667055	0.034	0.020	6663577
Benzo(a)anthracene	mg/kg	0.11	0.12	6667055	<0.020	0.020	6663577
Chrysene	mg/kg	0.22	0.23	6667055	<0.020	0.020	6663577
Benzo(b&j)fluoranthene	mg/kg	0.29	0.30	6667055	0.024	0.020	6663577
Benzo(k)fluoranthene	mg/kg	0.11	0.099	6667055	<0.020	0.020	6663577
Benzo(a)pyrene	mg/kg	0.18	0.19	6667055	<0.020	0.020	6663577
Indeno(1,2,3-cd)pyrene	mg/kg	0.12	0.12	6667055	<0.050	0.050	6663577
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	6667055	<0.050	0.050	6663577
Benzo(g,h,i)perylene	mg/kg	0.14	0.14	6667055	<0.050	0.050	6663577
Low Molecular Weight PAH`s	mg/kg	0.53	0.57	6648887	<0.050	0.050	6648887
High Molecular Weight PAH`s	mg/kg	2.1	2.3	6648887	0.094	0.050	6648887
Total PAH	mg/kg	2.7	2.8	6648887	0.12	0.050	6648887
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	92	91	6667055	100		6663577
D8-ACENAPHTHYLENE (sur.)	%	83	86	6667055	88		6663577
D8-NAPHTHALENE (sur.)	%	89	94	6667055	90		6663577
TERPHENYL-D14 (sur.)	%	91	92	6667055	100		6663577

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4768		FW4769	FW4770	FW4771		
Sampling Date		2013/03/13		2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-192-130313**	**QC Batch**	**SP13-193-130313**	**SP13-194-130313**	**SP13-195-130313**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	2.3	6649786	3.3	3.8	3.3	0.10	6649786
Benzo[a]pyrene equivalency	N/A	0.17	6649786	0.25	0.29	0.25	0.10	6649786
Polycyclic Aromatics								
Naphthalene	mg/kg	0.037	6667055	0.062	0.057	0.037	0.010	6663577
2-Methylnaphthalene	mg/kg	0.028	6667055	<0.020	0.031	<0.020	0.020	6663577
Acenaphthylene	mg/kg	0.010	6667055	0.014	0.012	0.011	0.0050	6663577
Acenaphthene	mg/kg	0.016	6667055	0.033	0.042	0.013	0.0050	6663577
Fluorene	mg/kg	<0.020	6667055	0.031	0.040	<0.020	0.020	6663577
Phenanthrene	mg/kg	0.19	6667055	0.35	0.46	0.26	0.020	6663577
Anthracene	mg/kg	0.022	6667055	0.037	0.092	0.027	0.0040	6663577
Fluoranthene	mg/kg	0.28	6667055	0.52	0.57	0.42	0.020	6663577
Pyrene	mg/kg	0.24	6667055	0.45	0.51	0.40	0.020	6663577
Benzo(a)anthracene	mg/kg	0.077	6667055	0.11	0.18	0.11	0.020	6663577
Chrysene	mg/kg	0.15	6667055	0.23	0.26	0.21	0.020	6663577
Benzo(b&j)fluoranthene	mg/kg	0.19	6667055	0.26	0.29	0.27	0.020	6663577
Benzo(k)fluoranthene	mg/kg	0.057	6667055	0.10	0.10	0.097	0.020	6663577
Benzo(a)pyrene	mg/kg	0.11	6667055	0.16	0.20	0.16	0.020	6663577
Indeno(1,2,3-cd)pyrene	mg/kg	0.072	6667055	0.11	0.11	0.11	0.050	6663577
Dibenz(a,h)anthracene	mg/kg	<0.050	6667055	<0.050	<0.050	<0.050	0.050	6663577
Benzo(g,h,i)perylene	mg/kg	0.082	6667055	0.11	0.11	0.11	0.050	6663577
Low Molecular Weight PAH`s	mg/kg	0.30	6648887	0.53	0.73	0.35	0.050	6648887
High Molecular Weight PAH`s	mg/kg	1.4	6648887	2.2	2.5	2.0	0.050	6648887
Total PAH	mg/kg	1.7	6648887	2.8	3.2	2.4	0.050	6648887
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	85	6667055	102	86	100		6663577
D8-ACENAPHTHYLENE (sur.)	%	81	6667055	93	85	97		6663577
D8-NAPHTHALENE (sur.)	%	86	6667055	99	88	102		6663577
TERPHENYL-D14 (sur.)	%	86	6667055	106	91	106		6663577

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW4772	FW4776	FW4777	FW4778		
Sampling Date		2013/03/13	2013/03/13	2013/03/13	2013/03/13		
	UNITS	**SP13-196-130313**	**SP13-197-130313**	**SP13-198-130313**	**SP13-199-130313**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	0.31	3.9	3.4	1.3	0.10	6649786
Benzo[a]pyrene equivalency	N/A	<0.10	0.29	0.26	0.10	0.10	6649786
Polycyclic Aromatics							
Naphthalene	mg/kg	<0.010	0.085	0.038	0.064	0.010	6667055
2-Methylnaphthalene	mg/kg	<0.020	0.021	0.022	0.049	0.020	6667055
Acenaphthylene	mg/kg	<0.0050	0.015	0.021	0.0059	0.0050	6667055
Acenaphthene	mg/kg	<0.0050	0.017	0.018	0.019	0.0050	6667055
Fluorene	mg/kg	<0.020	<0.020	0.021	0.021	0.020	6667055
Phenanthrene	mg/kg	<0.020	0.33	0.26	0.12	0.020	6667055
Anthracene	mg/kg	<0.0040	0.023	0.050	0.021	0.0040	6667055
Fluoranthene	mg/kg	<0.020	0.50	0.45	0.13	0.020	6667055
Pyrene	mg/kg	<0.020	0.42	0.38	0.16	0.020	6667055
Benzo(a)anthracene	mg/kg	<0.020	0.12	0.15	0.046	0.020	6667055
Chrysene	mg/kg	<0.020	0.26	0.22	0.080	0.020	6667055
Benzo(b&j)fluoranthene	mg/kg	<0.020	0.32	0.27	0.10	0.020	6667055
Benzo(k)fluoranthene	mg/kg	<0.020	0.11	0.077	0.031	0.020	6667055
Benzo(a)pyrene	mg/kg	<0.020	0.20	0.17	0.057	0.020	6667055
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.13	0.10	<0.050	0.050	6667055
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6667055
Benzo(g,h,i)perylene	mg/kg	<0.050	0.15	0.11	<0.050	0.050	6667055
Low Molecular Weight PAH`s	mg/kg	<0.050	0.49	0.43	0.30	0.050	6648887
High Molecular Weight PAH`s	mg/kg	<0.050	2.4	2.1	0.67	0.050	6648887
Total PAH	mg/kg	<0.050	2.9	2.5	0.97	0.050	6648887
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	93	95	92	84		6667055
D8-ACENAPHTHYLENE (sur.)	%	85	85	85	76		6667055
D8-NAPHTHALENE (sur.)	%	87	92	90	80		6667055
TERPHENYL-D14 (sur.)	%	93	94	92	83		6667055

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW4743	FW4743		FW4744		FW4745		FW4746		
Sampling Date		2013/03/13	2013/03/13		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-179-130313**	**SP13-179-130313 Lab-Dup**	**RDL**	**SP13-180-130313**	**RDL**	**SP13-180-01-130313**	**RDL**	**SP13-181-130313**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	242	239	10	211	10	142	10	164	10	6675226
Soluble Chloride (Cl)	mg/L	221	217	5.0	101	5.0	55.7	5.0	72.7	5.0	6675203
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	117		2.6	50.4	2.5	28.5	2.6	36.9	2.5	6649789
Soluble Sodium (Na)	mg/kg	84.2		2.6	50.6	2.5	31.5	2.6	37.5	2.5	6649789
Soluble Parameters											
Soluble Conductivity	uS/cm	1100	1110	1.0	795	1.0	626	1.0	587	1.0	6668408
Soluble pH	pH Units	7.48	7.51	N/A	7.50	N/A	7.68	N/A	7.72	N/A	6668327
Wet Soluble Calcium (Ca)	mg/L	130	125	5.0	102	5.0	72.5	5.0	67.9	5.0	6673069
Saturation %	%	52.9	52.5	1.0	50.1	1.0	51.1	1.0	50.7	1.0	6668323
Wet Soluble Magnesium (Mg)	mg/L	30.7	29.7	5.0	32.7	5.0	25.1	5.0	27.9	5.0	6673069
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	20	<20	20	<20	20	6673069
Wet Soluble Sodium (Na)	mg/L	159	156	5.0	101	5.0	61.6	5.0	73.9	5.0	6673069
Wet Soluble Sulphur (S)	mg/L	99	99	30	90	30	52	30	56	30	6673069
Sodium Adsorption Ratio	N/A	3.26		0.10	2.22	0.10	1.59	0.10	1.91	0.10	6649788

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW4747	FW4748		FW4749	FW4750		FW4751		
Sampling Date		2013/03/13	2013/03/13		2013/03/13	2013/03/13		2013/03/13		
	UNITS	**SP13-182-130313**	**SP13-183-130313**	**RDL**	**SP13-184-130313**	**SP13-185-130313**	**RDL**	**SP13-186-130313**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	259	202	10	183	166	10	515	10	6675226
Soluble Chloride (Cl)	mg/L	175	93.2	5.0	82.8	100	5.0	394	5.0	6675203
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	87.5	46.9	2.5	44.6	53.5	2.7	276	3.5	6649789
Soluble Sodium (Na)	mg/kg	72.4	45.0	2.5	38.4	50.3	2.7	229	3.5	6649789
Soluble Parameters										
Soluble Conductivity	uS/cm	1020	736	1.0	703	705	1.0	1880	1.0	6668408
Soluble pH	pH Units	7.68	7.62	N/A	7.56	7.45	N/A	7.45	N/A	6668327
Wet Soluble Calcium (Ca)	mg/L	114	105	5.0	114	84.2	5.0	167	5.0	6673069
Saturation %	%	49.9	50.3	1.0	53.9	53.4	1.0	70.0	1.0	6668323
Wet Soluble Magnesium (Mg)	mg/L	38.3	31.6	5.0	30.1	30.9	5.0	45.3	5.0	6673069
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	<20	20	22	20	6673069
Wet Soluble Sodium (Na)	mg/L	145	89.5	5.0	71.2	94.1	5.0	327	5.0	6673069
Wet Soluble Sulphur (S)	mg/L	100	73	30	64	62	30	209	30	6673069
Sodium Adsorption Ratio	N/A	3.00	1.97	0.10	1.53	2.23	0.10	5.79	0.10	6649788

N/A = Not Applicable
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Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW4752		FW4763		FW4764		FW4765		
Sampling Date		2013/03/13		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-187-130313**	**RDL**	**SP13-188-130313**	**RDL**	**SP13-189-130313**	**RDL**	**SP13-190-130313**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	166	10	395	10	235	10	161	10	6675226
Soluble Chloride (Cl)	mg/L	111	5.0	230	5.0	96.9	5.0	31.6	5.0	6675203
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	59.5	2.7	133	2.9	49.8	2.6	17.0	2.7	6649789
Soluble Sodium (Na)	mg/kg	50.2	2.7	123	2.9	46.9	2.6	20.9	2.7	6649789
Soluble Parameters										
Soluble Conductivity	uS/cm	777	1.0	1360	1.0	786	1.0	509	1.0	6668408
Soluble pH	pH Units	7.38	N/A	7.57	N/A	7.54	N/A	7.63	N/A	6668327
Wet Soluble Calcium (Ca)	mg/L	89.2	5.0	139	5.0	113	5.0	88.3	5.0	6673069
Saturation %	%	53.8	1.0	57.8	1.0	51.4	1.0	53.9	1.0	6668323
Wet Soluble Magnesium (Mg)	mg/L	30.9	5.0	38.2	5.0	34.6	5.0	35.0	5.0	6673069
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6673069
Wet Soluble Sodium (Na)	mg/L	93.3	5.0	212	5.0	91.2	5.0	38.9	5.0	6673069
Wet Soluble Sulphur (S)	mg/L	61	30	149	30	83	30	51	30	6673069
Sodium Adsorption Ratio	N/A	2.17	0.10	4.12	0.10	1.93	0.10	0.89	0.10	6649788

N/A = Not Applicable
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Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW4766	FW4767		FW4768		FW4769		FW4770		
Sampling Date		2013/03/13	2013/03/13		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-190-01-130313**	**SP13-191-130313**	**RDL**	**SP13-192-130313**	**RDL**	**SP13-193-130313**	**RDL**	**SP13-194-130313**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	151	399	10	57	10	184	10	33	10	6675297
Soluble Chloride (Cl)	mg/L	32.4	61.6	5.0	24.9	5.0	136	5.0	30.2	5.0	6675295
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	16.7	32.6	2.6	13.4	2.7	68.3	2.5	17.9	3.0	6649789
Soluble Sodium (Na)	mg/kg	19.8	70.0	2.6	18.4	2.7	53.6	2.5	19.5	3.0	6649789
Soluble Parameters											
Soluble Conductivity	uS/cm	557	927	1.0	424	1.0	811	1.0	394	1.0	6668831
Soluble pH	pH Units	7.66	7.25	N/A	7.25	N/A	7.24	N/A	7.25	N/A	6668707
Wet Soluble Calcium (Ca)	mg/L	109	124	5.0	78.8	5.0	125	5.0	79.2	5.0	6673083
Saturation %	%	51.6	52.9	1.0	53.7	1.0	50.2	1.0	59.1	1.0	6668658
Wet Soluble Magnesium (Mg)	mg/L	33.6	35.3	5.0	27.7	5.0	44.6	5.0	34.0	5.0	6673083
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	20	22	20	<20	20	6673083
Wet Soluble Sodium (Na)	mg/L	38.4	132	5.0	34.2	5.0	107	5.0	32.9	5.0	6673083
Wet Soluble Sulphur (S)	mg/L	50	132	30	<30	30	70	30	<30	30	6673083
Sodium Adsorption Ratio	N/A	0.83	2.70	0.10	0.84	0.10	2.09	0.10	0.78	0.10	6649788

N/A = Not Applicable
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Maxxam

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW4771		FW4772		FW4776		FW4777		FW4778		
Sampling Date		2013/03/13		2013/03/13		2013/03/13		2013/03/13		2013/03/13		
	UNITS	**SP13-195-130313**	**RDL**	**SP13-196-130313**	**RDL**	**SP13-197-130313**	**RDL**	**SP13-198-130313**	**RDL**	**SP13-199-130313**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	89	10	69	10	86	10	143	10	57	10	6675297
Soluble Chloride (Cl)	mg/L	31.9	5.0	31.4	5.0	25.3	5.0	30.7	5.0	14.1	5.0	6675295
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	18.4	2.9	16.9	2.7	12.4	2.5	14.4	2.4	7.5	2.7	6649789
Soluble Sodium (Na)	mg/kg	17.6	2.9	18.8	2.7	17.0	2.5	13.6	2.4	10.4	2.7	6649789
Soluble Parameters												
Soluble Conductivity	uS/cm	431	1.0	420	1.0	417	1.0	487	1.0	336	1.0	6668831
Soluble pH	pH Units	7.37	N/A	7.42	N/A	7.59	N/A	7.49	N/A	7.36	N/A	6668707
Wet Soluble Calcium (Ca)	mg/L	75.5	5.0	73.4	5.0	77.3	5.0	104	5.0	66.3	5.0	6673083
Saturation %	%	57.8	1.0	53.9	1.0	49.0	1.0	47.0	1.0	53.1	1.0	6668658
Wet Soluble Magnesium (Mg)	mg/L	28.9	5.0	25.1	5.0	36.0	5.0	28.6	5.0	25.1	5.0	6673083
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	21	20	<20	20	<20	20	6673083
Wet Soluble Sodium (Na)	mg/L	30.5	5.0	35.0	5.0	34.7	5.0	28.8	5.0	19.6	5.0	6673083
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	42	30	<30	30	6673083
Sodium Adsorption Ratio	N/A	0.76	0.10	0.90	0.10	0.82	0.10	0.65	0.10	0.52	0.10	6649788

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	5.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6651204	Moisture	2013/03/15					<0.30	%	5.4	20		
6651391	Moisture	2013/03/16					<0.30	%	4.0	20		
6652059	200 mesh (>.075 mm)	2013/03/15							9.0	35		
6652059	200 mesh (<.075 mm)	2013/03/15							1.7	35		
6653580	Total Antimony (Sb)	2013/03/18	116	75 - 125	103	75 - 125	<0.10	mg/kg	0.3	30	98	70 - 130
6653580	Total Arsenic (As)	2013/03/18	109	75 - 125	102	75 - 125	<0.50	mg/kg	0.4	30	100	70 - 130
6653580	Total Barium (Ba)	2013/03/18	NC	75 - 125	101	75 - 125	<0.10	mg/kg	2.6	35	102	70 - 130
6653580	Total Beryllium (Be)	2013/03/18	118	75 - 125	105	75 - 125	<0.40	mg/kg	NC	30		
6653580	Total Cadmium (Cd)	2013/03/18	114	75 - 125	106	75 - 125	<0.050	mg/kg	1.1	30	101	70 - 130
6653580	Total Chromium (Cr)	2013/03/18	111	75 - 125	100	75 - 125	<1.0	mg/kg	2.1	30	98	70 - 130
6653580	Total Cobalt (Co)	2013/03/18	104	75 - 125	102	75 - 125	<0.30	mg/kg	1.7	30	92	70 - 130
6653580	Total Copper (Cu)	2013/03/18	105	75 - 125	105	75 - 125	<0.50	mg/kg	2.3	30	86	70 - 130
6653580	Total Lead (Pb)	2013/03/18	108	75 - 125	103	75 - 125	<0.10	mg/kg	3.3	35	102	70 - 130
6653580	Total Lithium (Li)	2013/03/18	110	75 - 125	101	75 - 125	<5.0	mg/kg				
6653580	Total Manganese (Mn)	2013/03/18	NC	75 - 125	103	75 - 125	<0.20	mg/kg	3.7	30	100	70 - 130
6653580	Total Mercury (Hg)	2013/03/18	122	75 - 125	111	75 - 125	<0.050	mg/kg	NC	35	107	70 - 130
6653580	Total Molybdenum (Mo)	2013/03/18	113	75 - 125	107	75 - 125	<0.10	mg/kg	NC	35	105	70 - 130
6653580	Total Nickel (Ni)	2013/03/18	NC	75 - 125	102	75 - 125	<0.80	mg/kg	1.8	30	89	70 - 130
6653580	Total Selenium (Se)	2013/03/18	123	75 - 125	108	75 - 125	<0.50	mg/kg	NC	30		
6653580	Total Silver (Ag)	2013/03/18	105	75 - 125	99	75 - 125	<0.050	mg/kg	NC	35		
6653580	Total Strontium (Sr)	2013/03/18	103	75 - 125	99	75 - 125	<0.10	mg/kg	2.1	35	106	70 - 130
6653580	Total Thallium (Tl)	2013/03/18	103	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6653580	Total Tin (Sn)	2013/03/18	108	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
6653580	Total Titanium (Ti)	2013/03/18	NC	75 - 125	106	75 - 125	<1.0	mg/kg	2.0	35	102	70 - 130
6653580	Total Uranium (U)	2013/03/18	106	75 - 125	103	75 - 125	<0.050	mg/kg			96	70 - 130
6653580	Total Vanadium (V)	2013/03/18	NC	75 - 125	100	75 - 125	<2.0	mg/kg	3.4	30	106	70 - 130
6653580	Total Zinc (Zn)	2013/03/18	NC	75 - 125	112	75 - 125	<1.0	mg/kg	0.03	30	95	70 - 130
6653580	Total Aluminum (Al)	2013/03/18					<100	mg/kg	1.4	35	104	70 - 130
6653580	Total Calcium (Ca)	2013/03/18					<100	mg/kg	0.8	30	96	70 - 130
6653580	Total Iron (Fe)	2013/03/18					<100	mg/kg	1.2	30	94	70 - 130
6653580	Total Magnesium (Mg)	2013/03/18					<100	mg/kg	3.3	30	95	70 - 130
6653580	Total Phosphorus (P)	2013/03/18					<10	mg/kg	2.6	30	95	70 - 130
6653580	Total Bismuth (Bi)	2013/03/18					<0.10	mg/kg	NC	30		
6653580	Total Potassium (K)	2013/03/18					<100	mg/kg	NC	35		
6653580	Total Sodium (Na)	2013/03/18					<100	mg/kg	NC	35		
6653580	Total Zirconium (Zr)	2013/03/18					<0.50	mg/kg	1.0	30		
6653582	Soluble (2:1) pH	2013/03/18			101	96 - 104			0.4	20		
6653610	Total Antimony (Sb)	2013/03/18	111	75 - 125	109	75 - 125	<0.10	mg/kg	1	30	100	70 - 130
6653610	Total Arsenic (As)	2013/03/18	123	75 - 125	110	75 - 125	0.50, RDL=0.50	mg/kg	0.08	30	100	70 - 130

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6653610	Total Barium (Ba)	2013/03/18	NC	75 - 125	99	75 - 125	<0.10	mg/kg	0.9	35	95	70 - 130
6653610	Total Beryllium (Be)	2013/03/18	89	75 - 125	94	75 - 125	<0.40	mg/kg	NC	30		
6653610	Total Cadmium (Cd)	2013/03/18	110	75 - 125	114	75 - 125	<0.050	mg/kg	13.2	30	106	70 - 130
6653610	Total Chromium (Cr)	2013/03/18	NC	75 - 125	99	75 - 125	<1.0	mg/kg	2.8	30	96	70 - 130
6653610	Total Cobalt (Co)	2013/03/18	99	75 - 125	100	75 - 125	<0.30	mg/kg	4.4	30	91	70 - 130
6653610	Total Copper (Cu)	2013/03/18	NC	75 - 125	104	75 - 125	<0.50	mg/kg	1.5	30	90	70 - 130
6653610	Total Lead (Pb)	2013/03/18	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.4	35	96	70 - 130
6653610	Total Lithium (Li)	2013/03/18	101	75 - 125	97	75 - 125	<5.0	mg/kg	NC	30		
6653610	Total Manganese (Mn)	2013/03/18	NC	75 - 125	104	75 - 125	<0.20	mg/kg	3.9	30	95	70 - 130
6653610	Total Mercury (Hg)	2013/03/18	109	75 - 125	119	75 - 125	<0.050	mg/kg	0.2	35	86	70 - 130
6653610	Total Molybdenum (Mo)	2013/03/18	109	75 - 125	109	75 - 125	<0.10	mg/kg	0.4	35	104	70 - 130
6653610	Total Nickel (Ni)	2013/03/18	NC	75 - 125	101	75 - 125	<0.80	mg/kg	0.2	30	90	70 - 130
6653610	Total Selenium (Se)	2013/03/18	120	75 - 125	118	75 - 125	<0.50	mg/kg	NC	30		
6653610	Total Silver (Ag)	2013/03/18	103	75 - 125	102	75 - 125	<0.050	mg/kg	NC	35		
6653610	Total Strontium (Sr)	2013/03/18	NC	75 - 125	109	75 - 125	<0.10	mg/kg	1.4	35	106	70 - 130
6653610	Total Thallium (Tl)	2013/03/18	96	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	83	70 - 130
6653610	Total Tin (Sn)	2013/03/18	101	75 - 125	103	75 - 125	<0.10	mg/kg	0.3	35		
6653610	Total Titanium (Ti)	2013/03/18	NC	75 - 125	107	75 - 125	<1.0	mg/kg	2.1	35	99	70 - 130
6653610	Total Uranium (U)	2013/03/18	101	75 - 125	102	75 - 125	<0.050	mg/kg	0.5	30	97	70 - 130
6653610	Total Vanadium (V)	2013/03/18	NC	75 - 125	99	75 - 125	<2.0	mg/kg	1.7	30	99	70 - 130
6653610	Total Zinc (Zn)	2013/03/18	NC	75 - 125	108	75 - 125	<1.0	mg/kg	1	30	99	70 - 130
6653610	Total Aluminum (Al)	2013/03/18					<100	mg/kg	2.6	35	98	70 - 130
6653610	Total Calcium (Ca)	2013/03/18					<100	mg/kg	0.7	30	81	70 - 130
6653610	Total Iron (Fe)	2013/03/18					<100	mg/kg	1.9	30	85	70 - 130
6653610	Total Magnesium (Mg)	2013/03/18					<100	mg/kg	1.5	30	97	70 - 130
6653610	Total Phosphorus (P)	2013/03/18					<10	mg/kg	2.0	30	98	70 - 130
6653610	Total Bismuth (Bi)	2013/03/18					<0.10	mg/kg	NC	30		
6653610	Total Potassium (K)	2013/03/18					<100	mg/kg	2.1	35		
6653610	Total Sodium (Na)	2013/03/18					<100	mg/kg	2.9	35		
6653610	Total Zirconium (Zr)	2013/03/18					<0.50	mg/kg	0.6	30		
6653619	Soluble (2:1) pH	2013/03/19			102	96 - 104			0.9	20		
6654019	1,4-Difluorobenzene (sur.)	2013/03/16	117	70 - 130	97	70 - 130	99	%				
6654019	4-BROMOFLUOROBENZENE (sur.)	2013/03/16	129	70 - 130	99	70 - 130	110	%				
6654019	D10-ETHYLBENZENE (sur.)	2013/03/16	98	50 - 130	75	50 - 130	88	%				
6654019	D4-1,2-DICHLOROETHANE (sur.)	2013/03/16	100	70 - 130	97	70 - 130	92	%				
6654019	Benzene	2013/03/18	102	60 - 140	87	60 - 140	<0.0050	mg/kg	NC (1)	40		
6654019	Toluene	2013/03/18	106	60 - 140	116	60 - 140	<0.020	mg/kg	36.9 (2)	40		
6654019	Ethylbenzene	2013/03/18	109	60 - 140	84	60 - 140	<0.010	mg/kg	18.3 (2)	40		
6654019	m & p-Xylene	2013/03/18	111	60 - 140	82	60 - 140	<0.040	mg/kg	16.6 (2)	40		

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6654019	o-Xylene	2013/03/18	122	60 - 140	88	60 - 140	<0.040	mg/kg	35.3(2)	40		
6654019	(C6-C10)	2013/03/16			102	60 - 140	<10	mg/kg				
6654019	Methyl-tert-butylether(MTBE)	2013/03/16					<0.10	mg/kg				
6654019	Styrene	2013/03/18					<0.030	mg/kg	NC(2)	40		
6654019	Xylenes (Total)	2013/03/18					<0.040	mg/kg	25.2	40		
6656659	1,4-Difluorobenzene (sur.)	2013/03/17	96	70 - 130	95	70 - 130	96	%				
6656659	4-BROMOFLUOROBENZENE (sur.)	2013/03/17	96	70 - 130	100	70 - 130	97	%				
6656659	D10-ETHYLBENZENE (sur.)	2013/03/17	110	50 - 130	96	50 - 130	102	%				
6656659	D4-1,2-DICHLOROETHANE (sur.)	2013/03/17	108	70 - 130	103	70 - 130	101	%				
6656659	Benzene	2013/03/17	108	60 - 140	91	60 - 140	<0.0050	mg/kg	NC	40		
6656659	Toluene	2013/03/17	133	60 - 140	114	60 - 140	<0.020	mg/kg	NC	40		
6656659	Ethylbenzene	2013/03/17	121	60 - 140	105	60 - 140	<0.010	mg/kg	NC	40		
6656659	m & p-Xylene	2013/03/17	120	60 - 140	105	60 - 140	<0.040	mg/kg	NC	40		
6656659	o-Xylene	2013/03/17	123	60 - 140	105	60 - 140	<0.040	mg/kg	NC	40		
6656659	(C6-C10)	2013/03/17			105	60 - 140	<10	mg/kg	NC	40		
6656659	Methyl-tert-butylether(MTBE)	2013/03/17					<0.10	mg/kg	NC	40		
6656659	Styrene	2013/03/17					<0.030	mg/kg	NC	40		
6656659	Xylenes (Total)	2013/03/17					<0.040	mg/kg	NC	40		
6663577	D10-ANTHRACENE (sur.)	2013/03/20	84	60 - 130	91	60 - 130	85	%				
6663577	D8-ACENAPHTHYLENE (sur.)	2013/03/20	81	50 - 130	90	50 - 130	86	%				
6663577	D8-NAPHTHALENE (sur.)	2013/03/20	85	50 - 130	93	50 - 130	91	%				
6663577	TERPHENYL-D14 (sur.)	2013/03/20	87	60 - 130	94	60 - 130	90	%				
6663577	Naphthalene	2013/03/20	84	50 - 130	85	50 - 130	<0.010	mg/kg				
6663577	2-Methylnaphthalene	2013/03/20	82	50 - 130	83	50 - 130	<0.020	mg/kg				
6663577	Acenaphthylene	2013/03/20	86	50 - 130	86	50 - 130	<0.0050	mg/kg				
6663577	Acenaphthene	2013/03/20	89	50 - 130	89	50 - 130	<0.0050	mg/kg				
6663577	Fluorene	2013/03/20	86	50 - 130	86	50 - 130	<0.020	mg/kg				
6663577	Phenanthrene	2013/03/20	86	60 - 130	86	60 - 130	<0.020	mg/kg				
6663577	Anthracene	2013/03/20	87	60 - 130	87	60 - 130	<0.0040	mg/kg				
6663577	Fluoranthene	2013/03/20	91	60 - 130	90	60 - 130	<0.020	mg/kg				
6663577	Pyrene	2013/03/20	92	60 - 130	91	60 - 130	<0.020	mg/kg				
6663577	Benzo(a)anthracene	2013/03/20	82	60 - 130	81	60 - 130	<0.020	mg/kg				
6663577	Chrysene	2013/03/20	90	60 - 130	93	60 - 130	<0.020	mg/kg				
6663577	Benzo(b&j)fluoranthene	2013/03/20	76	60 - 130	84	60 - 130	<0.020	mg/kg				
6663577	Benzo(k)fluoranthene	2013/03/20	82	60 - 130	74	60 - 130	<0.020	mg/kg				
6663577	Benzo(a)pyrene	2013/03/20	81	60 - 130	77	60 - 130	<0.020	mg/kg				
6663577	Indeno(1,2,3-cd)pyrene	2013/03/20	87	60 - 130	81	60 - 130	<0.050	mg/kg				
6663577	Dibenz(a,h)anthracene	2013/03/20	87	60 - 130	82	60 - 130	<0.050	mg/kg				
6663577	Benzo(g,h,i)perylene	2013/03/20	91	60 - 130	85	60 - 130	<0.050	mg/kg				

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Maxxam Job #: B320232
Report Date: 2013/03/21

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6663647	O-TERPHENYL (sur.)	2013/03/21	85	50 - 130	117	50 - 130	102	%				
6663647	F2 (C10-C16 Hydrocarbons)	2013/03/21	84	50 - 130	115	80 - 120	<10	mg/kg	NC	40		
6663647	F3 (C16-C34 Hydrocarbons)	2013/03/21	85	50 - 130	115	80 - 120	<10	mg/kg	NC	40		
6663647	F4 (C34-C50 Hydrocarbons)	2013/03/21	83	50 - 130	112	80 - 120	<10	mg/kg	NC	40		
6663647	Reached Baseline at C50	2013/03/21							NC	50		
6663666	O-TERPHENYL (sur.)	2013/03/19	92	50 - 130	103	50 - 130	89	%				
6663666	EPH (C10-C19)	2013/03/19	93	50 - 130	100	50 - 130	<100	mg/kg				
6663666	EPH (C19-C32)	2013/03/19	87	50 - 130	98	50 - 130	<100	mg/kg				
6667055	D10-ANTHRACENE (sur.)	2013/03/20	94	60 - 130	96	60 - 130	94	%				
6667055	D8-ACENAPHTHYLENE (sur.)	2013/03/20	87	50 - 130	90	50 - 130	87	%				
6667055	D8-NAPHTHALENE (sur.)	2013/03/20	93	50 - 130	94	50 - 130	90	%				
6667055	TERPHENYL-D14 (sur.)	2013/03/20	95	60 - 130	95	60 - 130	93	%				
6667055	Naphthalene	2013/03/20	90	50 - 130	89	50 - 130	<0.010	mg/kg	NC	50		
6667055	2-Methylnaphthalene	2013/03/20	86	50 - 130	85	50 - 130	<0.020	mg/kg	NC	50		
6667055	Acenaphthylene	2013/03/20	88	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
6667055	Acenaphthene	2013/03/20	93	50 - 130	92	50 - 130	<0.0050	mg/kg	NC	50		
6667055	Fluorene	2013/03/20	91	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6667055	Phenanthrene	2013/03/20	89	60 - 130	89	60 - 130	<0.020	mg/kg	10.7	50		
6667055	Anthracene	2013/03/20	98	60 - 130	96	60 - 130	<0.0040	mg/kg	NC	50		
6667055	Fluoranthene	2013/03/20	93	60 - 130	89	60 - 130	<0.020	mg/kg	14.8	50		
6667055	Pyrene	2013/03/20	88	60 - 130	85	60 - 130	<0.020	mg/kg	16.7	50		
6667055	Benzo(a)anthracene	2013/03/20	86	60 - 130	85	60 - 130	<0.020	mg/kg	NC	50		
6667055	Chrysene	2013/03/20	87	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
6667055	Benzo(b&j)fluoranthene	2013/03/20	93	60 - 130	91	60 - 130	<0.020	mg/kg	31.2	50		
6667055	Benzo(k)fluoranthene	2013/03/20	88	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
6667055	Benzo(a)pyrene	2013/03/20	92	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6667055	Indeno(1,2,3-cd)pyrene	2013/03/20	91	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
6667055	Dibenz(a,h)anthracene	2013/03/20	88	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6667055	Benzo(g,h,i)perylene	2013/03/20	88	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
6668323	Saturation %	2013/03/21			102	80 - 120	<1.0	%	0.7	30		
6668327	Soluble pH	2013/03/21			101	97 - 103			0.4	20		
6668408	Soluble Conductivity	2013/03/21			90	70 - 130	1.5, RDL=1.0	uS/cm	0.7	35		
6668658	Saturation %	2013/03/21			102	80 - 120	<1.0	%	0.4	30		
6668707	Soluble pH	2013/03/21			101	97 - 103			0.4	20		
6668831	Soluble Conductivity	2013/03/21			92	70 - 130	<1.0	uS/cm	0.4	35		
6673069	Wet Soluble Calcium (Ca)	2013/03/21					<5.0	mg/L	4.2	30		
6673069	Wet Soluble Magnesium (Mg)	2013/03/21					<5.0	mg/L	3.6	30		
6673069	Wet Soluble Potassium (K)	2013/03/21					<20	mg/L	NC	30		
6673069	Wet Soluble Sodium (Na)	2013/03/21					<5.0	mg/L	1.8	30		

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Maxxam Job #: B320232
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SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6673069	Wet Soluble Sulphur (S)	2013/03/21					<30	mg/L	NC	30		
6673083	Wet Soluble Calcium (Ca)	2013/03/21					<5.0	mg/L	4.5	30		
6673083	Wet Soluble Magnesium (Mg)	2013/03/21					<5.0	mg/L	NC	30		
6673083	Wet Soluble Potassium (K)	2013/03/21					<20	mg/L	NC	30		
6673083	Wet Soluble Sodium (Na)	2013/03/21					<5.0	mg/L	NC	30		
6673083	Wet Soluble Sulphur (S)	2013/03/21					<30	mg/L	NC	30		
6675203	Soluble Chloride (Cl)	2013/03/21					<5.0	mg/L	1.6	30		
6675226	Soluble Sulphate (SO4)	2013/03/21					<10	mg/L	1.1	30		
6675295	Soluble Chloride (Cl)	2013/03/21					<5.0	mg/L	NC	30		
6675297	Soluble Sulphate (SO4)	2013/03/21					<10	mg/L	3.1	30		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample matrix interference. Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(2) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B320232	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-12-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	Mark Edwards		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:
- report custody seal condition.

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FW4743	SP13-179-130313	13/03/13		soil				X	X			X				2	
2	FW 4744	180							X	X			X					
3	FW 4745	180-01							X	X			X					
4	FW 4746	181							X	X			X					
5	FW4747	182							X	X			X					
6	FW4748	183							X	X			X					
7	FW4749	184							X	X			X					
8	FW 4750	185					X	X	X	X	X		X					
9	FW 4751	186					X	X	X	X	X	X	X					
10	FW 4752	187							X	X			X					

B320232

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Mark Edwards	13/03/13	1200	[illegible]	2013/03/14	08:00		[ ]	5.5.6	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 632 0112 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B320232	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-11-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	Mark Edwards		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:
- report custody seal condition

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified):
Standard TAT = 8 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FW4763	SP13-188-130313	13/03/13		Soil		X	X	X	X	X		X				2	
2	FW 4764	189							X	X			X					
3	FW 4765	190							X	X			X					
4	FW 4766	190-01							X	X			X					
5	FW 4767	191							X	X			X					
6	FW 4768	192							X	X			X					
7	FW 4769	193							X	X			X					
8	FW 4770	194					X	X	X	X	X	X	X					
9	FW 4771	195							X	X			X					B320232
10	FW 4772	196							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/13	17:00	[illegible]	2013/03/14	08:00		[ ]	5.5, 6	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-Free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B320232	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#354772-13-01	Kim Dorrino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	Mark Edwards		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:
report custody seal condition

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FW4776	SP13-197-130313	13/03/13		Soil				X	X			X				2	
2	FW4777	198	↓		↓				X	X			X				2	
3	FW4778	199	↓		↓				X	X			X				2	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

B320232

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
MARK EDWARDS	13/03/13	1700	[illegible]	2013/03/14	08:00		[ ]	5.5, 6	[x] Yes [ ] No

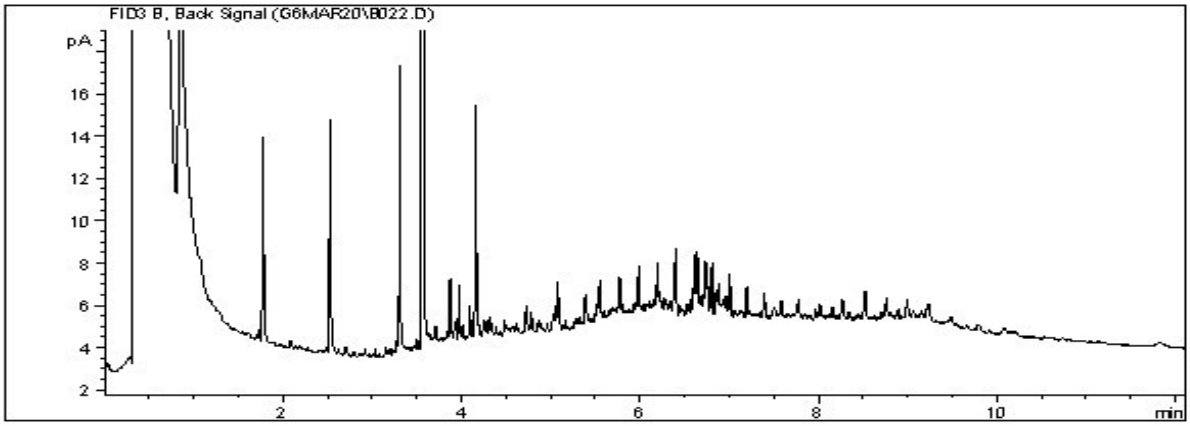
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

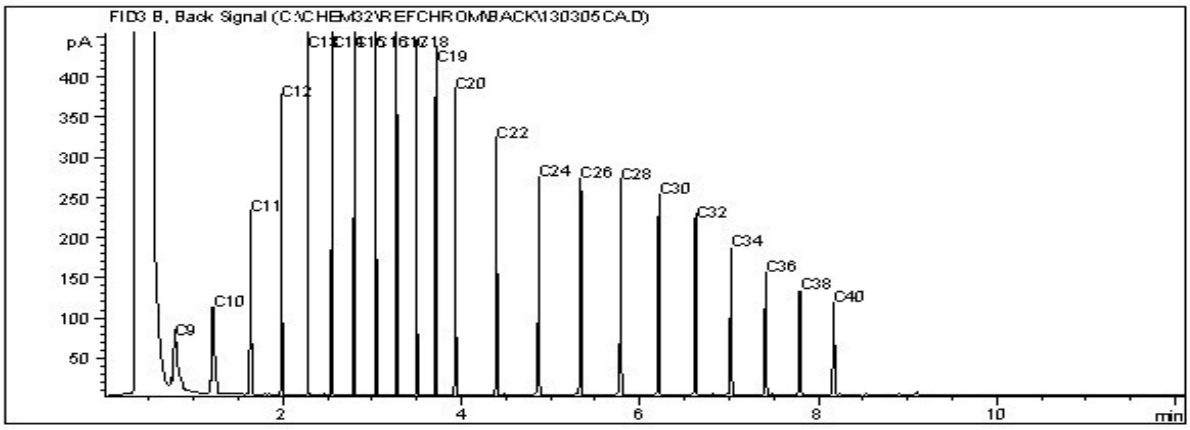
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4750

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-185-130313

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

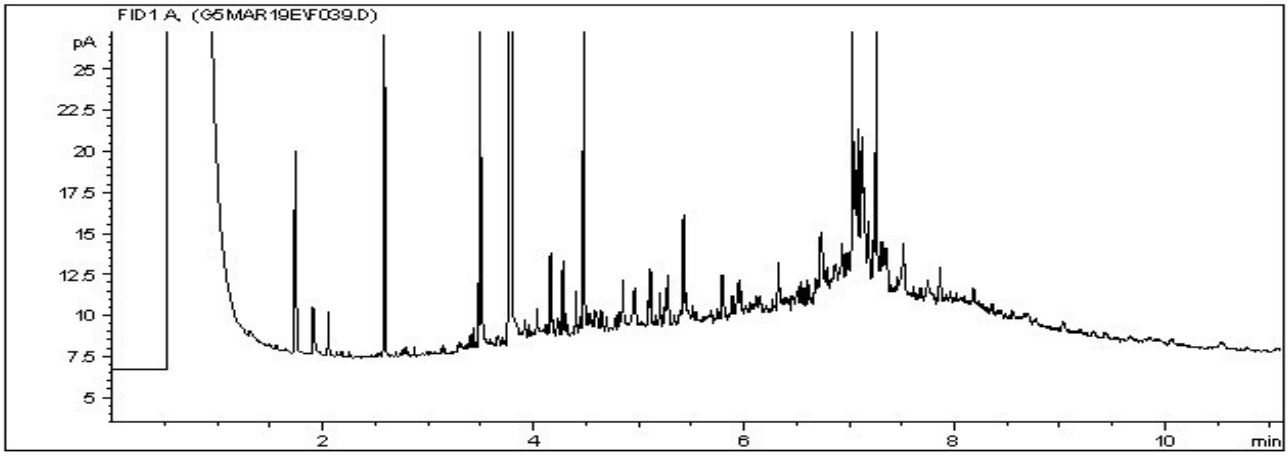
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

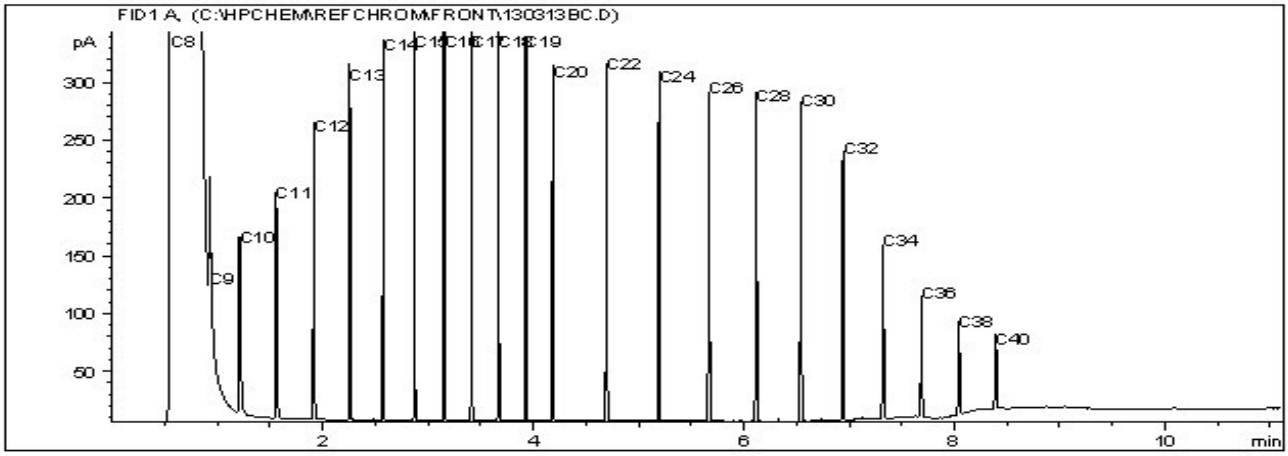
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4750

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-185-130313

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 -
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

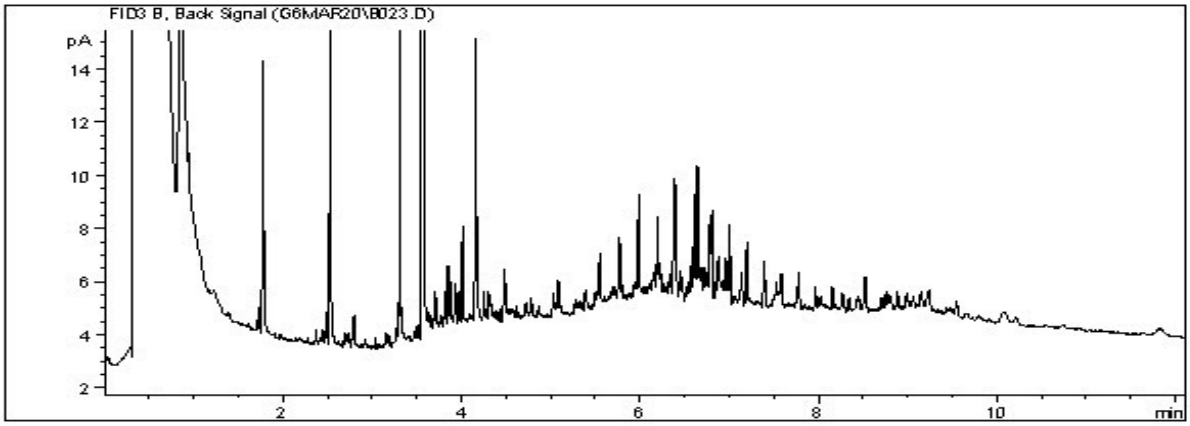
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

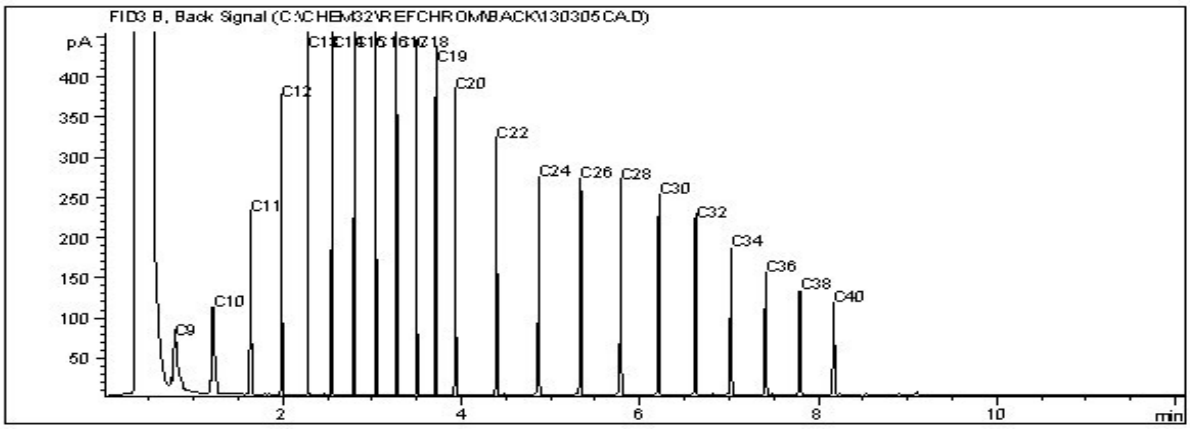
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4751

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-186-130313

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

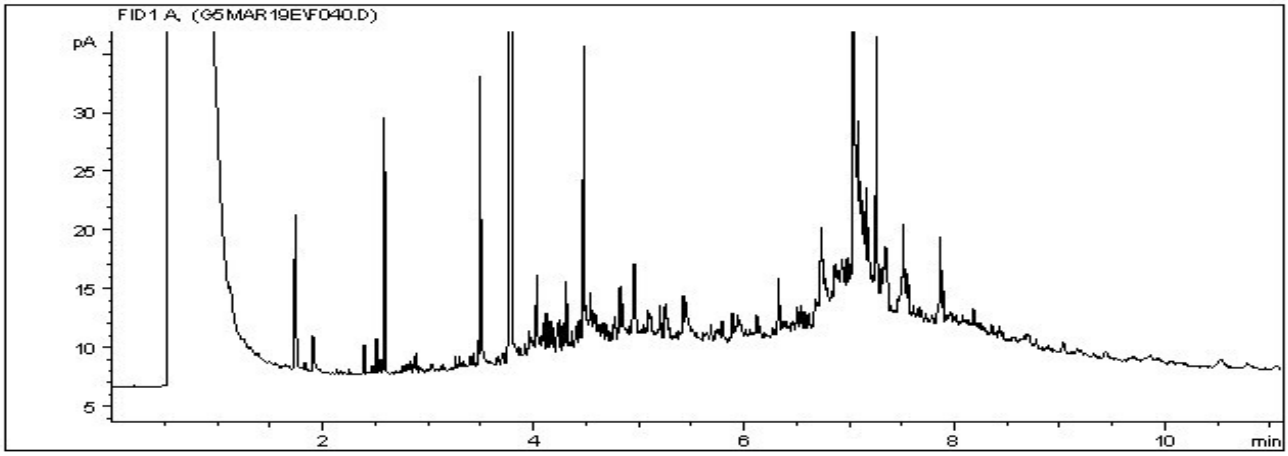
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

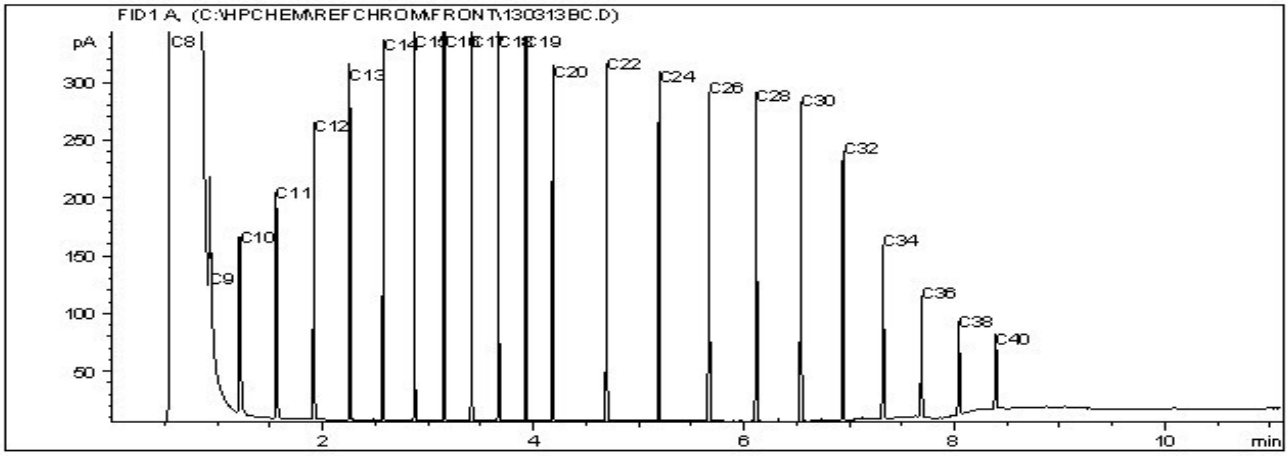
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4751

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-186-130313

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

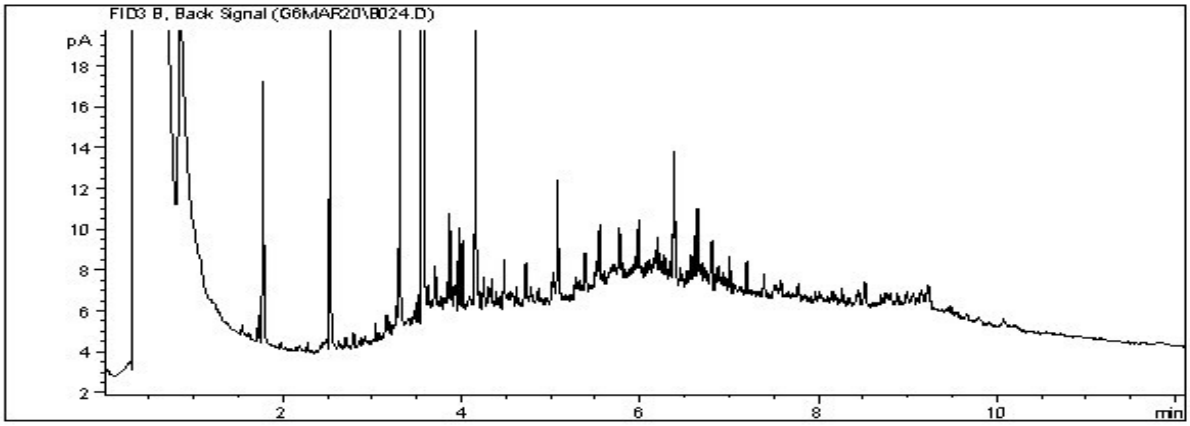
Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

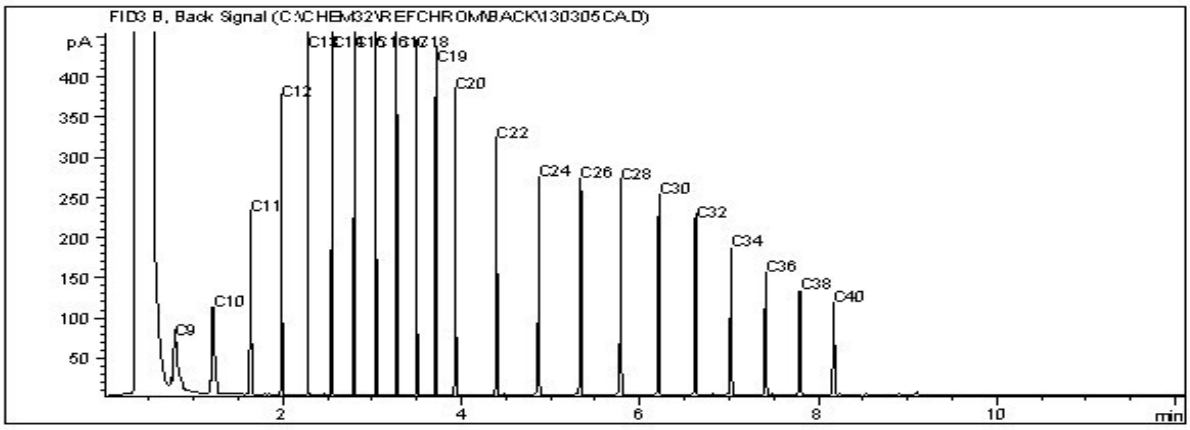
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4763

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-188-130313

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

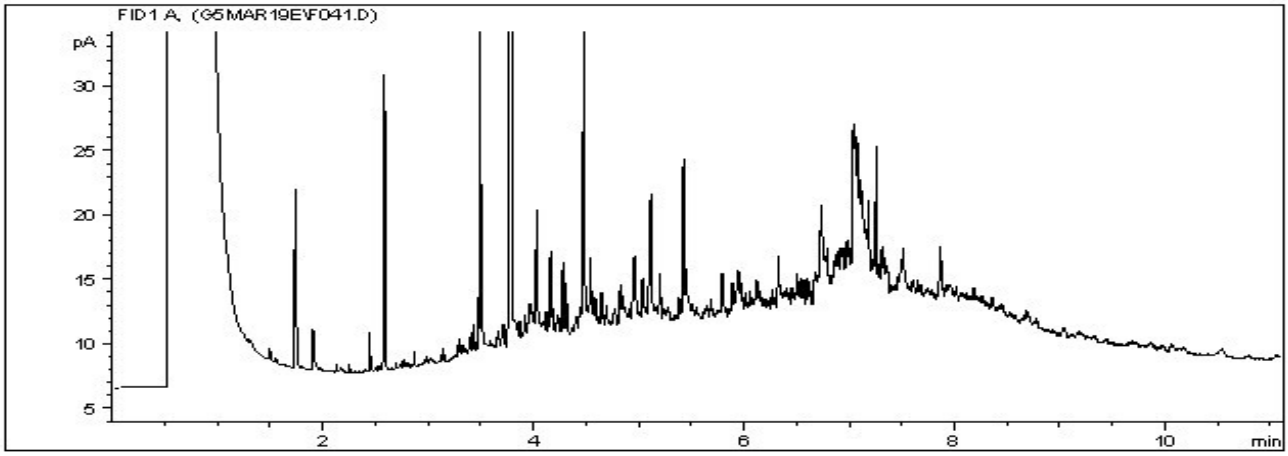
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

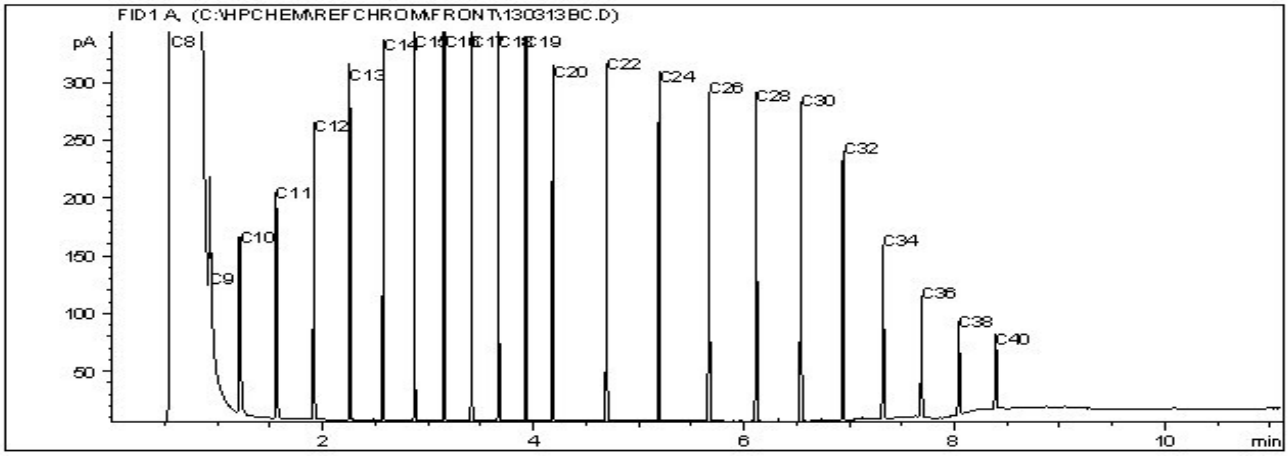
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4763

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-188-130313

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

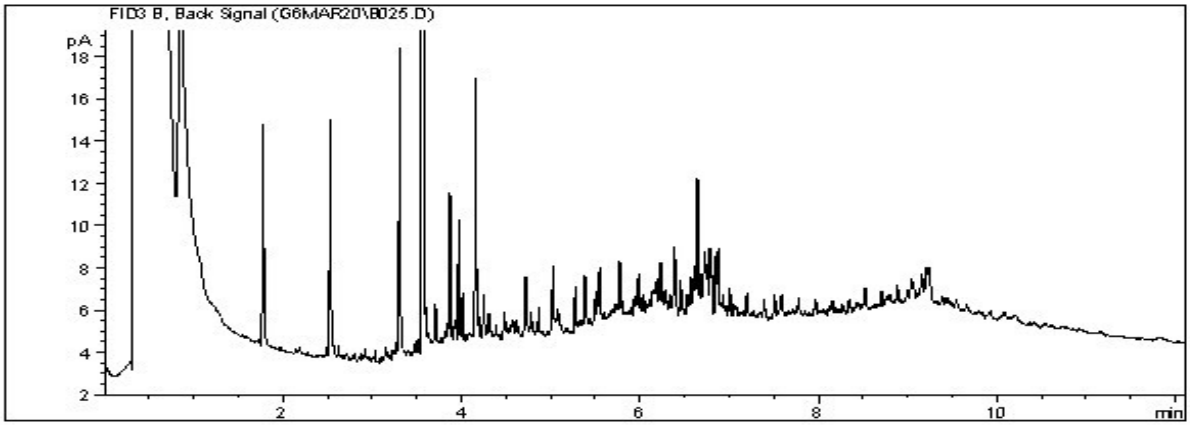
Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 -	Page 1 of 1
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

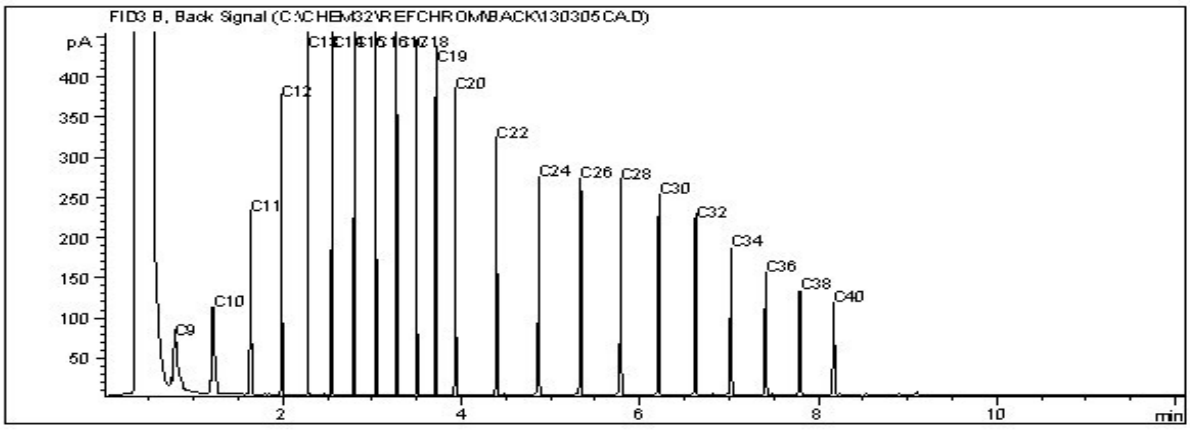
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4770

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-194-130313

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

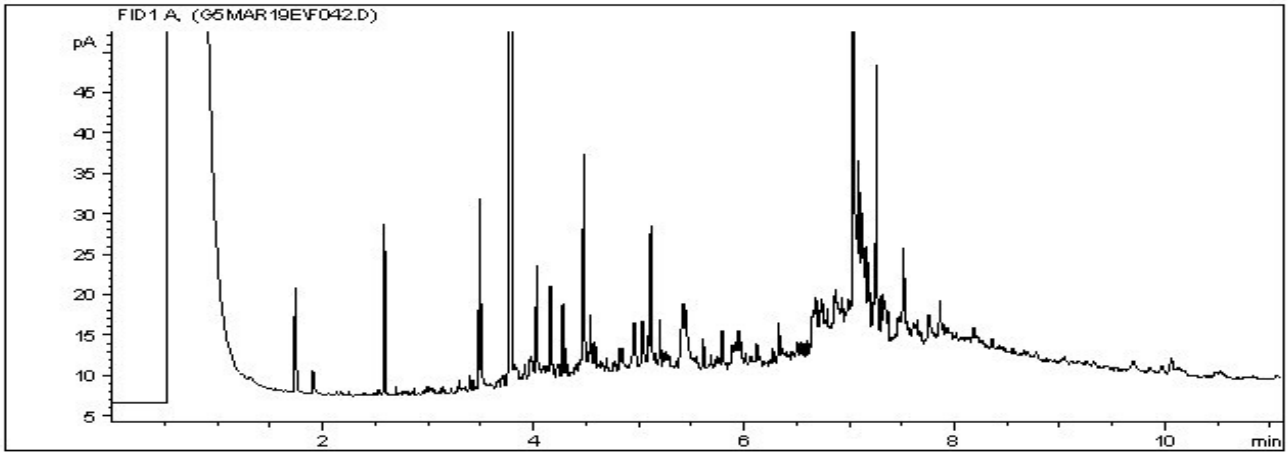
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

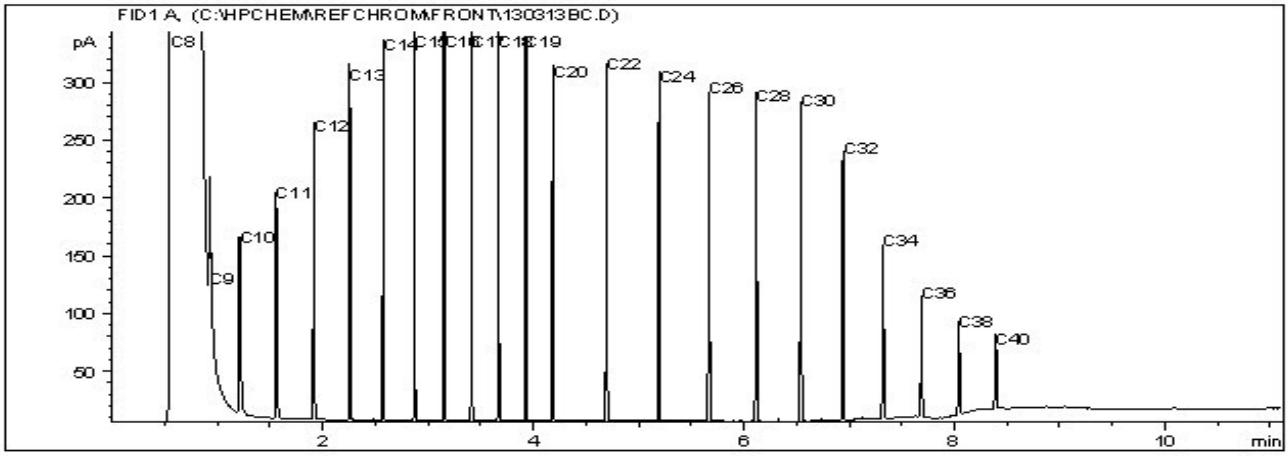
Report Date: 2013/03/21
Maxxam Job #: B320232
Maxxam Sample: FW4770

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-194-130313

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 -
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site#: VICTORIA, BC
Site Location: COLWOOD 18
Your C.O.C. #: 35477216

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B320618
Received: 2013/03/15, 09:15

Sample Matrix: Soil
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/03/16	2013/03/16	BBY8-SOP-00010	EPA SW846 8260C
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2013/03/16	2013/03/17	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	5	2013/03/21	2013/03/21	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	1	2013/03/21	2013/03/22	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	5	2013/03/20	2013/03/21	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	1	2013/03/22	2013/03/22	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	3	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	3	2013/03/16	2013/03/21	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	6	2013/03/17	2013/03/18	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	1	N/A	2013/03/18	BBY6SOP-00039	Carter SSMA 47.4
Moisture	6	N/A	2013/03/18	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	6	2013/03/16	2013/03/21	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	6	N/A	2013/03/22	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	6	N/A	2013/03/22	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	6	2013/03/18	2013/03/18	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	5	2013/03/20	2013/03/21	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	1	2013/03/21	2013/03/22	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	6	N/A	2013/03/19		
Saturated Paste	5	2013/03/20	2013/03/21	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	1	2013/03/21	2013/03/22	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	5	N/A	2013/03/21		
Soluble Ions Na, Cl	1	N/A	2013/03/22		
Sulphate (soluble) (soil)	5	2013/03/21	2013/03/21	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	1	2013/03/21	2013/03/22	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	5	N/A	2013/03/21	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	1	N/A	2013/03/22	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	3	N/A	2013/03/22	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	3	2013/03/16	2013/03/21	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam

Success Through Science®

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FW7973	FW7974	FW7978		
Sampling Date		2013/03/14	2013/03/14	2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**SP13-204-130314**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	10	6668782
F3 (C16-C34 Hydrocarbons)	mg/kg	55	54	37	10	6668782
F4 (C34-C50 Hydrocarbons)	mg/kg	43	48	32	10	6668782
Reached Baseline at C50	mg/kg	YES	YES	YES	N/A	6668782
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	96	84	92		6668782

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FW7978	FW7978		
Sampling Date		2013/03/14	2013/03/14		
	UNITS	**SP13-204-130314**	**SP13-204-130314 Lab-Dup**	**RDL**	**QC Batch**
Physical Properties					
200 mesh (>.075 mm)	%	54.2	51.9	0.10	6657609
200 mesh (<.075 mm)	%	45.8	48.1	0.10	6657609

PHYSICAL TESTING (SOIL)

Maxxam ID		FW7973	FW7974	FW7975	FW7976	FW7977	FW7978		
Sampling Date		2013/03/14	2013/03/14	2013/03/14	2013/03/14	2013/03/14	2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**SP13-201-130314**	**SP13-202-130314**	**SP13-203-130314**	**SP13-204-130314**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	20	17	27	23	25	23	0.30	6656108

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FW7973	FW7974	FW7978		
Sampling Date		2013/03/14	2013/03/14	2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**SP13-204-130314**	**RDL**	**QC Batch**
Calculated Parameters						
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	<100	100	6652973
HEPH (C19-C32 less PAH)	mg/kg	<100	<100	<100	100	6652973
Hydrocarbons						
EPH (C10-C19)	mg/kg	<100	<100	<100	100	6672231
EPH (C19-C32)	mg/kg	<100	<100	<100	100	6672231
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	100	100	100		6672231

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FW7973	FW7974		FW7978		
Sampling Date		2013/03/14	2013/03/14		2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**QC Batch**	**SP13-204-130314**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	6653523	<10	10	6653523
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	6656650	<0.10	0.10	6656659
Benzene	mg/kg	<0.0050	<0.0050	6656650	<0.0050	0.0050	6656659
Toluene	mg/kg	<0.020	<0.020	6656650	<0.020	0.020	6656659
Ethylbenzene	mg/kg	<0.010	<0.010	6656650	<0.010	0.010	6656659
m & p-Xylene	mg/kg	<0.040	<0.040	6656650	<0.040	0.040	6656659
o-Xylene	mg/kg	<0.040	<0.040	6656650	<0.040	0.040	6656659
Styrene	mg/kg	<0.030	<0.030	6656650	<0.030	0.030	6656659
Xylenes (Total)	mg/kg	<0.040	<0.040	6656650	<0.040	0.040	6656659
(C6-C10)	mg/kg	<10	<10	6656650	<10	10	6656659
Surrogate Recovery (%)							
1,4-Difluorobenzene (sur.)	%	97	98	6656650	98		6656659
4-BROMOFLUOROBENZENE (sur.)	%	94	95	6656650	90		6656659
D10-ETHYLBENZENE (sur.)	%	105	106	6656650	110		6656659
D4-1,2-DICHLOROETHANE (sur.)	%	104	104	6656650	110		6656659

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FW7973	FW7974	FW7975	FW7976	FW7977	FW7978		
Sampling Date		2013/03/14	2013/03/14	2013/03/14	2013/03/14	2013/03/14	2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**SP13-201-130314**	**SP13-202-130314**	**SP13-203-130314**	**SP13-204-130314**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.45	7.46	7.27	7.34	7.48	7.32	0.010	6656728
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22000	21500	22100	22600	21900	22200	100	6656727
Total Antimony (Sb)	mg/kg	2.36	3.16	2.14	2.43	1.48	0.98	0.10	6656727
Total Arsenic (As)	mg/kg	8.53	12.6	8.79	8.84	6.63	6.31	0.50	6656727
Total Barium (Ba)	mg/kg	83.7	84.1	91.5	92.2	93.0	93.3	0.10	6656727
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	0.41	0.41	<0.40	0.40	6656727
Total Bismuth (Bi)	mg/kg	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	0.10	6656727
Total Cadmium (Cd)	mg/kg	0.305	0.303	0.326	0.248	0.320	0.248	0.050	6656727
Total Calcium (Ca)	mg/kg	8140	8580	7930	8300	10000	9420	100	6656727
Total Chromium (Cr)	mg/kg	31.6	32.5	31.0	33.7	31.0	33.6	1.0	6656727
Total Cobalt (Co)	mg/kg	11.8	12.0	11.0	12.9	11.2	12.0	0.30	6656727
Total Copper (Cu)	mg/kg	45.3	54.9	35.7	51.4	43.9	41.4	0.50	6656727
Total Iron (Fe)	mg/kg	26600	26800	25400	26700	25200	27000	100	6656727
Total Lead (Pb)	mg/kg	21.9	26.9	18.5	23.8	25.1	19.5	0.10	6656727
Total Lithium (Li)	mg/kg	13.5	13.6	13.9	14.1	14.0	14.5	5.0	6656727
Total Magnesium (Mg)	mg/kg	8050	8490	6920	8220	7560	7800	100	6656727
Total Manganese (Mn)	mg/kg	572	665	580	581	622	568	0.20	6656727
Total Mercury (Hg)	mg/kg	0.075	0.099	0.064	0.084	0.078	0.067	0.050	6656727
Total Molybdenum (Mo)	mg/kg	1.27	1.69	1.13	1.11	1.21	0.88	0.10	6656727
Total Nickel (Ni)	mg/kg	26.0	25.5	25.8	27.8	25.6	26.9	0.80	6656727
Total Phosphorus (P)	mg/kg	654	623	724	689	758	663	10	6656727
Total Potassium (K)	mg/kg	754	735	650	731	706	738	100	6656727
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6656727
Total Silver (Ag)	mg/kg	0.072	0.101	0.082	0.087	0.088	0.093	0.050	6656727
Total Sodium (Na)	mg/kg	274	313	187	204	237	220	100	6656727
Total Strontium (Sr)	mg/kg	53.9	56.2	108	55.1	67.5	56.9	0.10	6656727
Total Thallium (Tl)	mg/kg	0.064	0.074	0.067	0.063	0.062	0.062	0.050	6656727
Total Tin (Sn)	mg/kg	1.83	2.12	2.12	2.26	3.79	1.33	0.10	6656727
Total Titanium (Ti)	mg/kg	961	1010	918	1010	1010	1000	1.0	6656727
Total Uranium (U)	mg/kg	0.892	0.947	0.947	0.752	0.949	0.605	0.050	6656727
Total Vanadium (V)	mg/kg	73.2	71.8	67.9	72.9	69.5	76.8	2.0	6656727
Total Zinc (Zn)	mg/kg	98.0	135	134	112	112	116	1.0	6656727
Total Zirconium (Zr)	mg/kg	3.62	3.62	3.27	3.28	2.91	3.35	0.50	6656727

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW7973	FW7974	FW7975	FW7976	FW7977		
Sampling Date		2013/03/14	2013/03/14	2013/03/14	2013/03/14	2013/03/14		
	UNITS	**SP13-200-130314**	**SP13-200-01-130314**	**SP13-201-130314**	**SP13-202-130314**	**SP13-203-130314**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	1.4	1.7	0.56	0.97	4.4	0.10	6654036
Benzo[a]pyrene equivalency	N/A	0.11	0.13	<0.10	<0.10	0.35	0.10	6654036
Polycyclic Aromatics								
Naphthalene	mg/kg	0.023	0.026	<0.010	<0.010	<0.010	0.010	6672243
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6672243
Acenaphthylene	mg/kg	0.0051	0.0083	<0.0050	0.0067	0.038	0.0050	6672243
Acenaphthene	mg/kg	0.0051	<0.0050	<0.0050	0.0098	<0.0050	0.0050	6672243
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6672243
Phenanthrene	mg/kg	0.11	0.12	0.026	0.079	0.10	0.020	6672243
Anthracene	mg/kg	0.010	0.011	<0.0040	0.017	0.049	0.0040	6672243
Fluoranthene	mg/kg	0.18	0.24	0.054	0.094	0.54	0.020	6672243
Pyrene	mg/kg	0.16	0.22	0.053	0.10	0.54	0.020	6672243
Benzo(a)anthracene	mg/kg	0.049	0.070	<0.020	0.044	0.26	0.020	6672243
Chrysene	mg/kg	0.097	0.13	0.033	0.062	0.30	0.020	6672243
Benzo(b&j)fluoranthene	mg/kg	0.11	0.13	0.042	0.069	0.32	0.020	6672243
Benzo(k)fluoranthene	mg/kg	0.037	0.042	<0.020	0.021	0.10	0.020	6672243
Benzo(a)pyrene	mg/kg	0.063	0.076	0.025	0.042	0.23	0.020	6672243
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.13	0.050	6672243
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6672243
Benzo(g,h,i)perylene	mg/kg	<0.050	0.058	<0.050	<0.050	0.14	0.050	6672243
Low Molecular Weight PAH`s	mg/kg	0.15	0.16	<0.050	0.11	0.19	0.050	6652972
High Molecular Weight PAH`s	mg/kg	0.75	1.0	0.24	0.48	2.7	0.050	6652972
Total PAH	mg/kg	0.91	1.2	0.26	0.59	2.9	0.050	6652972
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	99	104	94	95	90		6672243
D8-ACENAPHTHYLENE (sur.)	%	92	94	86	86	80		6672243
D8-NAPHTHALENE (sur.)	%	96	96	88	90	84		6672243
TERPHENYL-D14 (sur.)	%	101	108	98	98	94		6672243

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FW7978		
Sampling Date		2013/03/14		
	UNITS	**SP13-204-130314**	**RDL**	**QC Batch**
Calculated Parameters				
Index of Additive Cancer Risk(IARC)	N/A	0.61	0.10	6654036
Benzo[a]pyrene equivalency	N/A	<0.10	0.10	6654036
Polycyclic Aromatics				
Naphthalene	mg/kg	<0.010	0.010	6672243
2-Methylnaphthalene	mg/kg	<0.020	0.020	6672243
Acenaphthylene	mg/kg	<0.0050	0.0050	6672243
Acenaphthene	mg/kg	<0.0050	0.0050	6672243
Fluorene	mg/kg	<0.020	0.020	6672243
Phenanthrene	mg/kg	0.037	0.020	6672243
Anthracene	mg/kg	0.0040	0.0040	6672243
Fluoranthene	mg/kg	0.066	0.020	6672243
Pyrene	mg/kg	0.062	0.020	6672243
Benzo(a)anthracene	mg/kg	<0.020	0.020	6672243
Chrysene	mg/kg	0.038	0.020	6672243
Benzo(b&j)fluoranthene	mg/kg	0.048	0.020	6672243
Benzo(k)fluoranthene	mg/kg	<0.020	0.020	6672243
Benzo(a)pyrene	mg/kg	0.027	0.020	6672243
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.050	6672243
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	6672243
Benzo(g,h,i)perylene	mg/kg	<0.050	0.050	6672243
Low Molecular Weight PAH`s	mg/kg	<0.050	0.050	6652972
High Molecular Weight PAH`s	mg/kg	0.27	0.050	6652972
Total PAH	mg/kg	0.32	0.050	6652972
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	104		6672243
D8-ACENAPHTHYLENE (sur.)	%	95		6672243
D8-NAPHTHALENE (sur.)	%	99		6672243
TERPHENYL-D14 (sur.)	%	109		6672243

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW7973		FW7974		FW7975		
Sampling Date		2013/03/14		2013/03/14		2013/03/14		
	UNITS	**SP13-200-130314**	**RDL**	**SP13-200-01-130314**	**RDL**	**SP13-201-130314**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	67	10	78	10	54	10	6675297
Soluble Chloride (Cl)	mg/L	28.8	5.0	22.4	5.0	29.5	5.0	6675295
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	14.9	2.6	11.0	2.4	16.6	2.8	6655838
Soluble Sodium (Na)	mg/kg	14.6	2.6	14.8	2.4	16.4	2.8	6655838
Soluble Parameters								
Soluble Conductivity	uS/cm	379	1.0	414	1.0	352	1.0	6668831
Soluble pH	pH Units	7.31	N/A	7.30	N/A	7.10	N/A	6668707
Wet Soluble Calcium (Ca)	mg/L	68.5	5.0	79.5	5.0	60.6	5.0	6673083
Saturation %	%	51.8	1.0	49.0	1.0	56.2	1.0	6668658
Wet Soluble Magnesium (Mg)	mg/L	24.8	5.0	27.4	5.0	23.1	5.0	6673083
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	6673083
Wet Soluble Sodium (Na)	mg/L	28.3	5.0	30.2	5.0	29.1	5.0	6673083
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	6673083
Sodium Adsorption Ratio	N/A	0.74	0.10	0.75	0.10	0.81	0.10	6655837

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FW7976		FW7977			FW7978		
Sampling Date		2013/03/14		2013/03/14			2013/03/14		
	UNITS	**SP13-202-130314**	**RDL**	**SP13-203-130314**	**RDL**	**QC Batch**	**SP13-204-130314**	**RDL**	**QC Batch**
ANIONS									
Soluble Sulphate (SO4)	mg/L	71	10	43	10	6675297	65	10	6678694
Soluble Chloride (Cl)	mg/L	24.6	5.0	20.2	5.0	6675295	15.4	5.0	6678662
Calculated Parameters									
Soluble Chloride (Cl)	mg/kg	12.7	2.6	11.3	2.8	6655838	7.8	2.5	6655838
Soluble Sodium (Na)	mg/kg	13.3	2.6	12.1	2.8	6655838	12.9	2.5	6655838
Soluble Parameters									
Soluble Conductivity	uS/cm	335	1.0	366	1.0	6668831	328	1.0	6674091
Soluble pH	pH Units	7.31	N/A	7.26	N/A	6668707	7.24	N/A	6673969
Wet Soluble Calcium (Ca)	mg/L	60.5	5.0	66.6	5.0	6673083	54.3	5.0	6678076
Saturation %	%	51.7	1.0	56.2	1.0	6668658	50.8	1.0	6673963
Wet Soluble Magnesium (Mg)	mg/L	23.9	5.0	19.6	5.0	6673083	21.9	5.0	6678076
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	6673083	<20	20	6678076
Wet Soluble Sodium (Na)	mg/L	25.7	5.0	21.4	5.0	6673083	25.3	5.0	6678076
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	6673083	<30	30	6678076
Sodium Adsorption Ratio	N/A	0.71	0.10	0.59	0.10	6655837	0.73	0.10	6655837

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	4.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6656108	Moisture	2013/03/18					<0.30	%	12.2	20		
6656650	1,4-Difluorobenzene (sur.)	2013/03/16	98	70 - 130	99	70 - 130	98	%				
6656650	4-BROMOFLUOROBENZENE (sur.)	2013/03/16	93	70 - 130	99	70 - 130	97	%				
6656650	D10-ETHYLBENZENE (sur.)	2013/03/16	114	50 - 130	96	50 - 130	96	%				
6656650	D4-1,2-DICHLOROETHANE (sur.)	2013/03/16	104	70 - 130	102	70 - 130	101	%				
6656650	Benzene	2013/03/16	104	60 - 140	93	60 - 140	<0.0050	mg/kg	NC(1)	40		
6656650	Toluene	2013/03/16	128	60 - 140	116	60 - 140	<0.020	mg/kg	NC(1)	40		
6656650	Ethylbenzene	2013/03/16	118	60 - 140	107	60 - 140	<0.010	mg/kg	NC(1)	40		
6656650	m & p-Xylene	2013/03/16	116	60 - 140	108	60 - 140	<0.040	mg/kg	NC(1)	40		
6656650	o-Xylene	2013/03/16	116	60 - 140	108	60 - 140	<0.040	mg/kg	NC(1)	40		
6656650	(C6-C10)	2013/03/16			103	60 - 140	<10	mg/kg	NC(1)	40		
6656650	Methyl-tert-butylether(MTBE)	2013/03/16					<0.10	mg/kg	NC(1)	40		
6656650	Styrene	2013/03/16					<0.030	mg/kg	NC(1)	40		
6656650	Xylenes (Total)	2013/03/16					<0.040	mg/kg	NC	40		
6656659	1,4-Difluorobenzene (sur.)	2013/03/17	96	70 - 130	95	70 - 130	96	%				
6656659	4-BROMOFLUOROBENZENE (sur.)	2013/03/17	96	70 - 130	100	70 - 130	97	%				
6656659	D10-ETHYLBENZENE (sur.)	2013/03/17	110	50 - 130	96	50 - 130	102	%				
6656659	D4-1,2-DICHLOROETHANE (sur.)	2013/03/17	108	70 - 130	103	70 - 130	101	%				
6656659	Benzene	2013/03/17	108	60 - 140	91	60 - 140	<0.0050	mg/kg	NC	40		
6656659	Toluene	2013/03/17	133	60 - 140	114	60 - 140	<0.020	mg/kg	NC	40		
6656659	Ethylbenzene	2013/03/17	121	60 - 140	105	60 - 140	<0.010	mg/kg	NC	40		
6656659	m & p-Xylene	2013/03/17	120	60 - 140	105	60 - 140	<0.040	mg/kg	NC	40		
6656659	o-Xylene	2013/03/17	123	60 - 140	105	60 - 140	<0.040	mg/kg	NC	40		
6656659	(C6-C10)	2013/03/17			105	60 - 140	<10	mg/kg	NC	40		
6656659	Methyl-tert-butylether(MTBE)	2013/03/17					<0.10	mg/kg	NC	40		
6656659	Styrene	2013/03/17					<0.030	mg/kg	NC	40		
6656659	Xylenes (Total)	2013/03/17					<0.040	mg/kg	NC	40		
6656727	Total Antimony (Sb)	2013/03/18	104	75 - 125	102	75 - 125	<0.10	mg/kg	NC	30	105	70 - 130
6656727	Total Arsenic (As)	2013/03/18	98	75 - 125	95	75 - 125	<0.50	mg/kg	2.3	30	105	70 - 130
6656727	Total Barium (Ba)	2013/03/18	NC	75 - 125	97	75 - 125	<0.10	mg/kg	2.9	35	99	70 - 130
6656727	Total Beryllium (Be)	2013/03/18	108	75 - 125	101	75 - 125	<0.40	mg/kg	NC	30		
6656727	Total Cadmium (Cd)	2013/03/18	104	75 - 125	100	75 - 125	<0.050	mg/kg	NC	30	116	70 - 130
6656727	Total Chromium (Cr)	2013/03/18	88	75 - 125	99	75 - 125	<1.0	mg/kg	0.9	30	103	70 - 130
6656727	Total Cobalt (Co)	2013/03/18	98	75 - 125	100	75 - 125	<0.30	mg/kg	1.8	30	93	70 - 130
6656727	Total Copper (Cu)	2013/03/18	107	75 - 125	101	75 - 125	<0.50	mg/kg	1.7	30	91	70 - 130
6656727	Total Lead (Pb)	2013/03/18	104	75 - 125	103	75 - 125	<0.10	mg/kg	3.8	35	100	70 - 130
6656727	Total Lithium (Li)	2013/03/18	104	75 - 125	101	75 - 125	<5.0	mg/kg				
6656727	Total Manganese (Mn)	2013/03/18	NC	75 - 125	101	75 - 125	<0.20	mg/kg	1.7	30	100	70 - 130
6656727	Total Mercury (Hg)	2013/03/18	106	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35	92	70 - 130

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6656727	Total Molybdenum (Mo)	2013/03/18	116	75 - 125	106	75 - 125	<0.10	mg/kg	NC	35	108	70 - 130
6656727	Total Nickel (Ni)	2013/03/18	NC	75 - 125	98	75 - 125	<0.80	mg/kg	2.2	30	91	70 - 130
6656727	Total Selenium (Se)	2013/03/18	105	75 - 125	98	75 - 125	<0.50	mg/kg	NC	30		
6656727	Total Silver (Ag)	2013/03/18	101	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35		
6656727	Total Strontium (Sr)	2013/03/18	104	75 - 125	99	75 - 125	<0.10	mg/kg	2.7	35	106	70 - 130
6656727	Total Thallium (Tl)	2013/03/18	100	75 - 125	95	75 - 125	<0.050	mg/kg	NC	30	88	70 - 130
6656727	Total Tin (Sn)	2013/03/18	105	75 - 125	100	75 - 125	<0.10	mg/kg	NC	35		
6656727	Total Titanium (Ti)	2013/03/18	NC	75 - 125	105	75 - 125	<1.0	mg/kg	1	35	103	70 - 130
6656727	Total Uranium (U)	2013/03/18	104	75 - 125	101	75 - 125	<0.050	mg/kg			108	70 - 130
6656727	Total Vanadium (V)	2013/03/18	NC	75 - 125	96	75 - 125	<2.0	mg/kg	0.3	30	104	70 - 130
6656727	Total Zinc (Zn)	2013/03/18	NC	75 - 125	100	75 - 125	<1.0	mg/kg	0.2	30	101	70 - 130
6656727	Total Aluminum (Al)	2013/03/18					<100	mg/kg	2.5	35	103	70 - 130
6656727	Total Calcium (Ca)	2013/03/18					<100	mg/kg	0.6	30	91	70 - 130
6656727	Total Iron (Fe)	2013/03/18					<100	mg/kg	0.9	30	91	70 - 130
6656727	Total Magnesium (Mg)	2013/03/18					<100	mg/kg	1.2	30	95	70 - 130
6656727	Total Phosphorus (P)	2013/03/18					<10	mg/kg	2.8	30	95	70 - 130
6656727	Total Bismuth (Bi)	2013/03/18					<0.10	mg/kg	NC	30		
6656727	Total Potassium (K)	2013/03/18					<100	mg/kg	1.7	35		
6656727	Total Sodium (Na)	2013/03/18					<100	mg/kg	NC	35		
6656727	Total Zirconium (Zr)	2013/03/18					<0.50	mg/kg	0.5	30		
6656728	Soluble (2:1) pH	2013/03/18			102	96 - 104			0.1	20		
6657609	200 mesh (>.075 mm)	2013/03/18							4.3	35		
6657609	200 mesh (<.075 mm)	2013/03/18							4.9	35		
6668658	Saturation %	2013/03/21			102	80 - 120	<1.0	%	0.4	30		
6668707	Soluble pH	2013/03/21			101	97 - 103			0.4	20		
6668782	O-TERPHENYL (sur.)	2013/03/21	92	50 - 130	101	50 - 130	96	%				
6668782	F2 (C10-C16 Hydrocarbons)	2013/03/21	91	50 - 130	99	80 - 120	<10	mg/kg	NC	40		
6668782	F3 (C16-C34 Hydrocarbons)	2013/03/21	92	50 - 130	100	80 - 120	<10	mg/kg	NC	40		
6668782	F4 (C34-C50 Hydrocarbons)	2013/03/21	89	50 - 130	97	80 - 120	<10	mg/kg	NC	40		
6668782	Reached Baseline at C50	2013/03/21							NC	50		
6668831	Soluble Conductivity	2013/03/21			92	70 - 130	<1.0	uS/cm	0.4	35		
6672231	O-TERPHENYL (sur.)	2013/03/21	100	50 - 130	103	50 - 130	105	%				
6672231	EPH (C10-C19)	2013/03/21	101	50 - 130	103	50 - 130	<100	mg/kg	NC	40		
6672231	EPH (C19-C32)	2013/03/21	90	50 - 130	93	50 - 130	<100	mg/kg	NC	40		
6672243	D10-ANTHRACENE (sur.)	2013/03/21			93	60 - 130	108	%				
6672243	D8-ACENAPHTHYLENE (sur.)	2013/03/21			91	50 - 130	103	%				
6672243	D8-NAPHTHALENE (sur.)	2013/03/21			92	50 - 130	106	%				
6672243	TERPHENYL-D14 (sur.)	2013/03/21			99	60 - 130	110	%				
6672243	Naphthalene	2013/03/21			95	50 - 130	<0.010	mg/kg				

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6672243	2-Methylnaphthalene	2013/03/21			92	50 - 130	<0.020	mg/kg				
6672243	Acenaphthylene	2013/03/21			94	50 - 130	<0.0050	mg/kg				
6672243	Acenaphthene	2013/03/21			97	50 - 130	<0.0050	mg/kg				
6672243	Fluorene	2013/03/21			95	50 - 130	<0.020	mg/kg				
6672243	Phenanthrene	2013/03/21			98	60 - 130	<0.020	mg/kg				
6672243	Anthracene	2013/03/21			93	60 - 130	<0.0040	mg/kg				
6672243	Fluoranthene	2013/03/21			96	60 - 130	<0.020	mg/kg				
6672243	Pyrene	2013/03/21			99	60 - 130	<0.020	mg/kg				
6672243	Benzo(a)anthracene	2013/03/21			94	60 - 130	<0.020	mg/kg				
6672243	Chrysene	2013/03/21			96	60 - 130	<0.020	mg/kg				
6672243	Benzo(b&j)fluoranthene	2013/03/21			96	60 - 130	<0.020	mg/kg				
6672243	Benzo(k)fluoranthene	2013/03/21			98	60 - 130	<0.020	mg/kg				
6672243	Benzo(a)pyrene	2013/03/21			99	60 - 130	<0.020	mg/kg				
6672243	Indeno(1,2,3-cd)pyrene	2013/03/21			98	60 - 130	<0.050	mg/kg				
6672243	Dibenz(a,h)anthracene	2013/03/21			96	60 - 130	<0.050	mg/kg				
6672243	Benzo(g,h,i)perylene	2013/03/21			93	60 - 130	<0.050	mg/kg				
6673083	Wet Soluble Calcium (Ca)	2013/03/21					<5.0	mg/L	4.5	30		
6673083	Wet Soluble Magnesium (Mg)	2013/03/21					<5.0	mg/L	NC	30		
6673083	Wet Soluble Potassium (K)	2013/03/21					<20	mg/L	NC	30		
6673083	Wet Soluble Sodium (Na)	2013/03/21					<5.0	mg/L	NC	30		
6673083	Wet Soluble Sulphur (S)	2013/03/21					<30	mg/L	NC	30		
6673963	Saturation %	2013/03/22			108	80 - 120	<1.0	%	0.4	30		
6673969	Soluble pH	2013/03/22			101	97 - 103			2.4	20		
6674091	Soluble Conductivity	2013/03/22			100	70 - 130	<1.0	uS/cm	1.4	35		
6675295	Soluble Chloride (Cl)	2013/03/21					<5.0	mg/L	NC	30		
6675297	Soluble Sulphate (SO4)	2013/03/21					<10	mg/L	3.1	30		
6678076	Wet Soluble Calcium (Ca)	2013/03/22					<5.0	mg/L	6.7	30		
6678076	Wet Soluble Magnesium (Mg)	2013/03/22					<5.0	mg/L	NC	30		
6678076	Wet Soluble Potassium (K)	2013/03/22					<20	mg/L	NC	30		
6678076	Wet Soluble Sodium (Na)	2013/03/22					<5.0	mg/L	4.2	30		
6678076	Wet Soluble Sulphur (S)	2013/03/22					<30	mg/L	NC	30		

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Maxxam Job #: B320618
Report Date: 2013/03/22

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6678662	Soluble Chloride (Cl)	2013/03/22					<5.0	mg/L	8.7	30		
6678694	Soluble Sulphate (SO4)	2013/03/22					<10	mg/L	6.6	30		

N/A = Not Applicable
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to high sample moisture content.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0115 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B320618	364272
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:			
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	0K354772-16-01	Kim Dumba
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	M.E.		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS: Pls. report custody seal code.

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FW7973	SP13-200-130314	13-03-14		Soil		X	X	X	X	X		X					
2	FW7974	SP13-200-01-130314	↓		↓		X	X	X	X	X		X					
3	FW7975	SP13-201-130314							X	X			X					
4	FW7976	SP13-202-130314							X	X			X					
5	FW7977	SP13-203-130314							X	X			X					
6	FW7978	SP13-204-130314	↓		↓		X	X	X	X	X	X	X					
7																		
8																		
9																		
10																		

B320618

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact?
MEdwards / MARK EDWARDS	13/03/14		Veronica de Guzman	13/03/15	09:15		[ ]	4, 4, 7	[X] Yes [ ] No

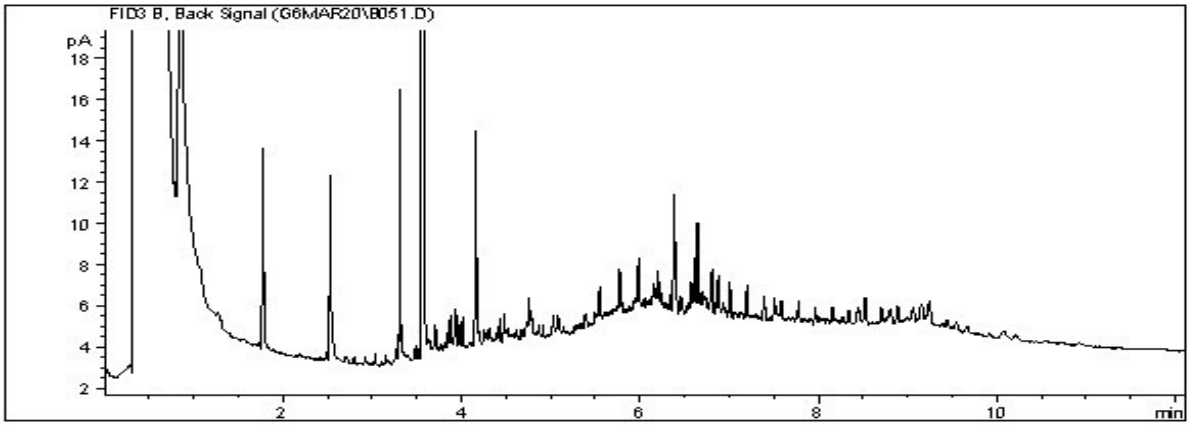
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

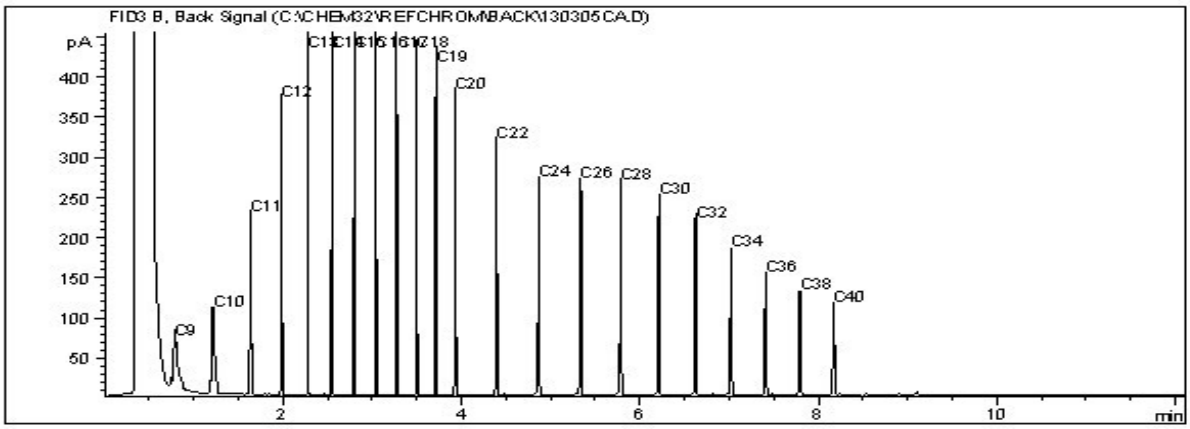
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7973

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-200-130314

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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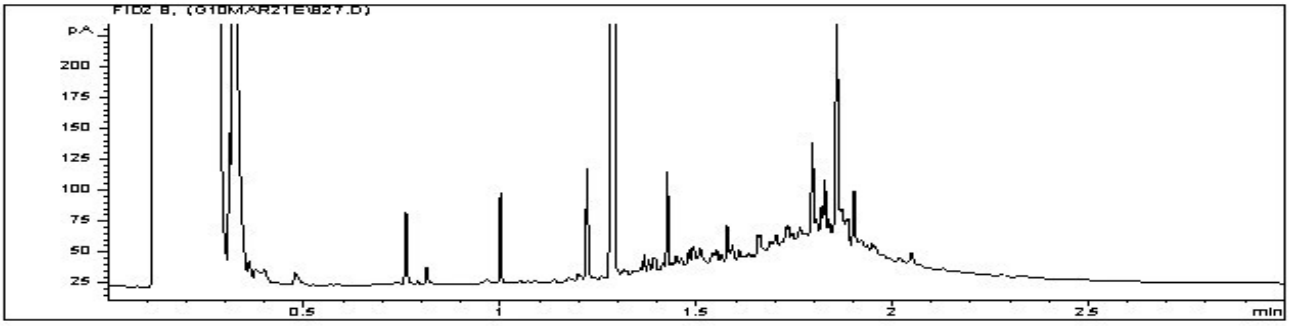
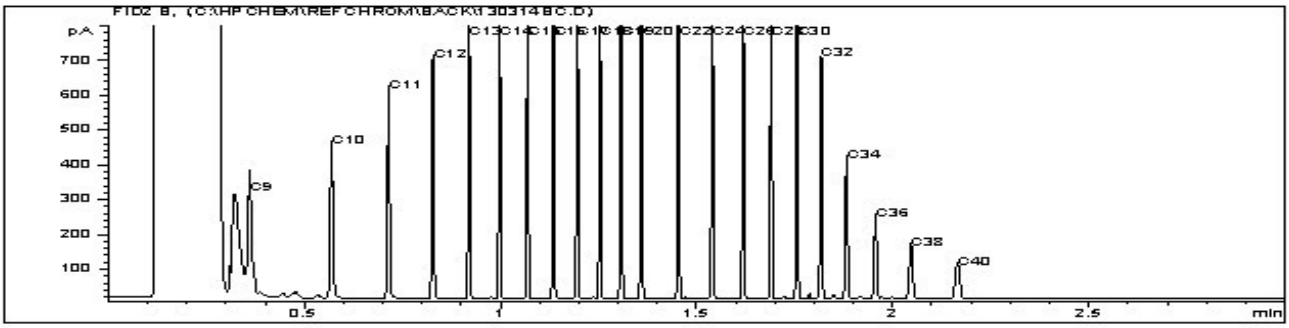
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7973

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-200-130314

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

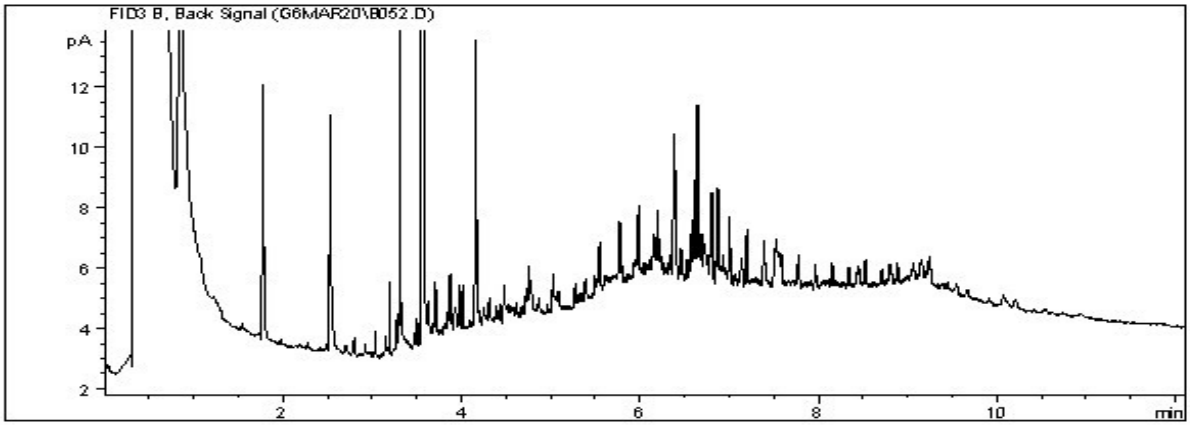
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

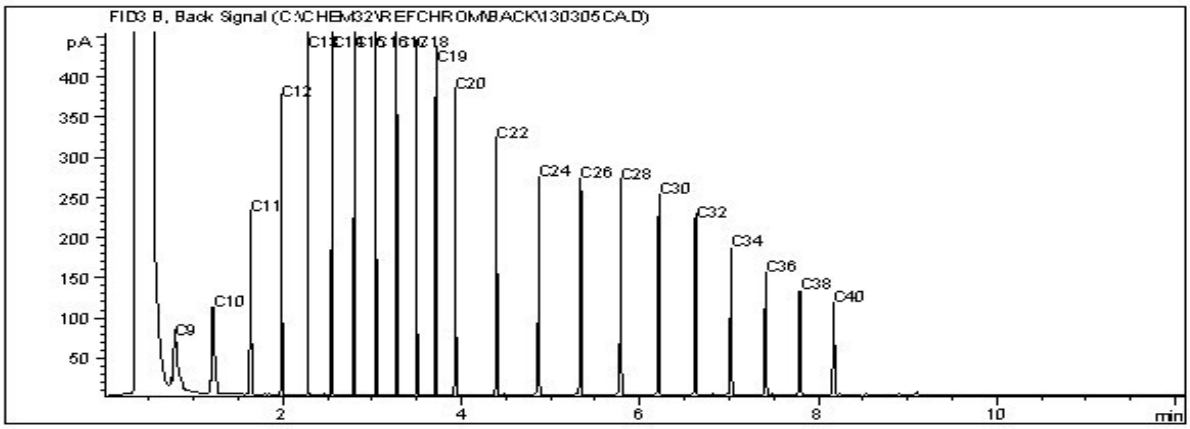
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7974

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-200-01-130314

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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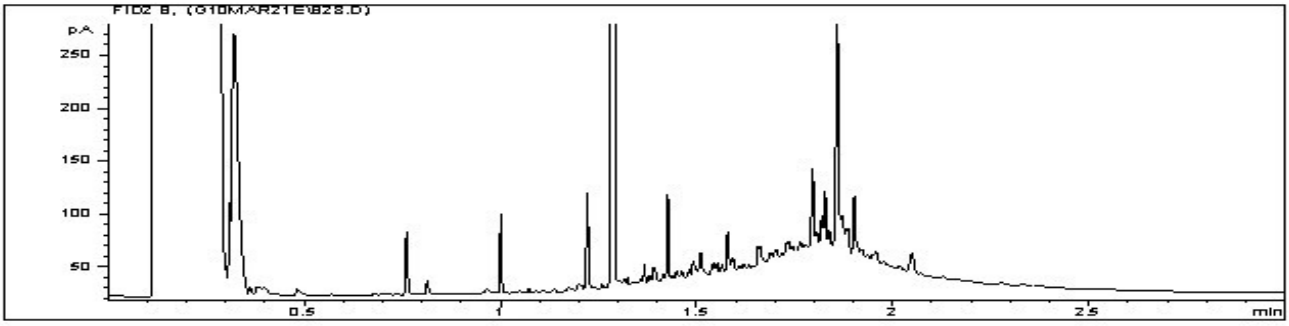
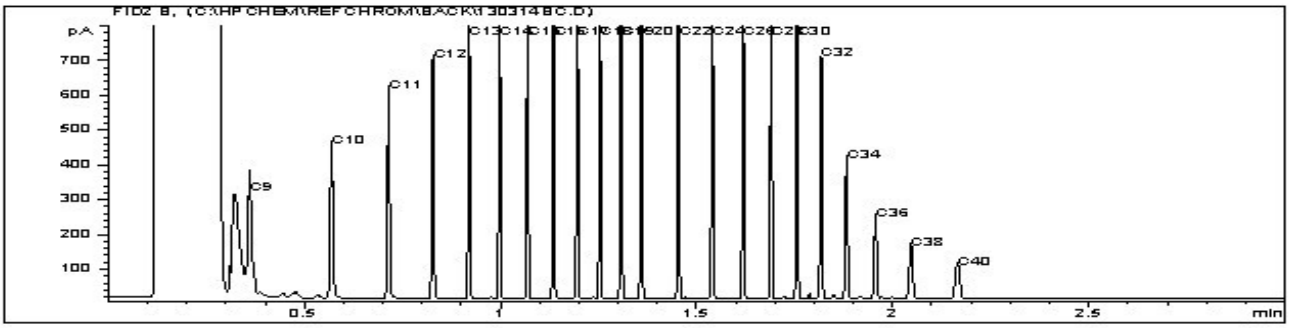
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7974

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-200-01-130314

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

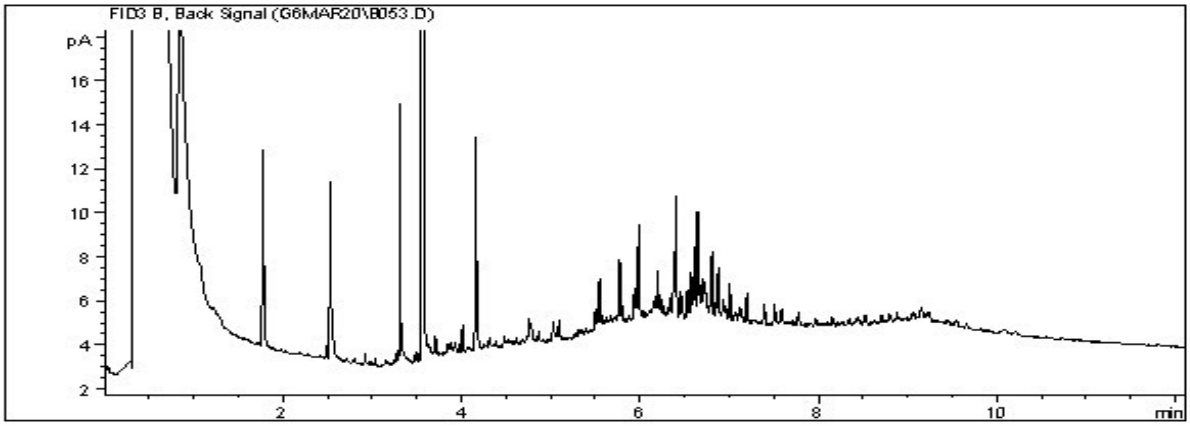
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

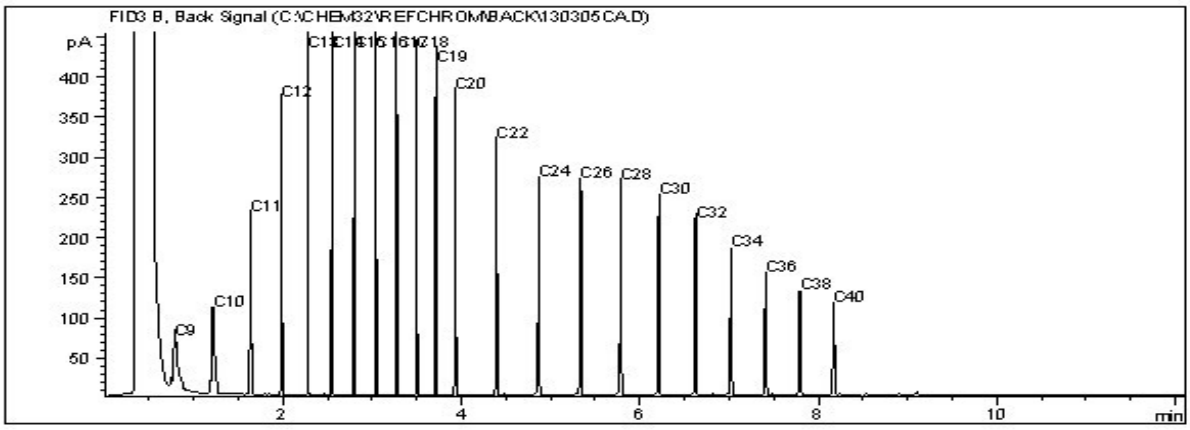
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7978

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-204-130314

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

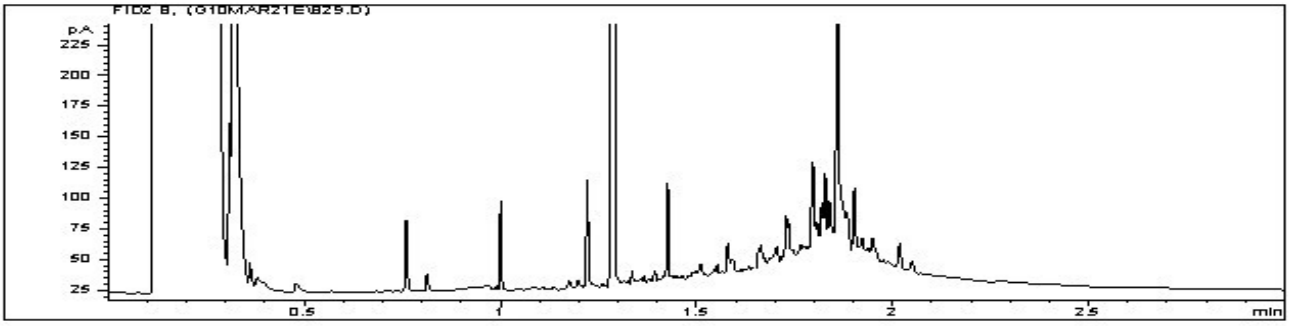
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

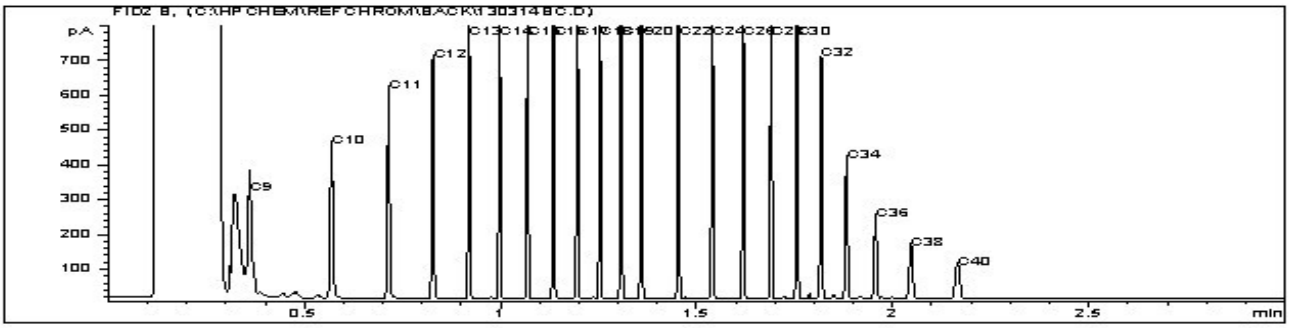
Report Date: 2013/03/22
Maxxam Job #: B320618
Maxxam Sample: FW7978

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-204-130314

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam

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Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your C.O.C. #: 35477217

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B320914
Received: 2013/03/16, 09:45

Sample Matrix: Soil
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/03/17	2013/03/18	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	2	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	2	2013/03/17	2013/03/19	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	5	2013/03/17	2013/03/18	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	1	N/A	2013/03/18	BBY6SOP-00039	Carter SSMA 47.4
Moisture	5	N/A	2013/03/18	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	5	2013/03/17	2013/03/18	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	5	N/A	2013/03/19	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	5	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	5	2013/03/18	2013/03/18	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	5	2013/03/19	2013/03/20	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	5	N/A	2013/03/18		
Saturated Paste	5	2013/03/19	2013/03/20	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	5	N/A	2013/03/20		
Sulphate (soluble) (soil)	5	2013/03/19	2013/03/20	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	5	N/A	2013/03/20	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	2	N/A	2013/03/19	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	2	2013/03/17	2013/03/19	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FX0621	FX0624		
Sampling Date		2013/03/15	2013/03/15		
	UNITS	**SP13-206-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon					
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	10	6661593
F3 (C16-C34 Hydrocarbons)	mg/kg	19	60	10	6661593
F4 (C34-C50 Hydrocarbons)	mg/kg	23	59	10	6661593
Reached Baseline at C50	mg/kg	YES	YES	N/A	6661593
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	91	89		6661593

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FX0622		
Sampling Date		2013/03/15		
	UNITS	**SP13-207-130315**	**RDL**	**QC Batch**
Physical Properties				
200 mesh (>.075 mm)	%	52.1	0.10	6657609
200 mesh (<.075 mm)	%	47.9	0.10	6657609

PHYSICAL TESTING (SOIL)

Maxxam ID		FX0620		FX0621		FX0622	FX0623	FX0624		
Sampling Date		2013/03/15		2013/03/15		2013/03/15	2013/03/15	2013/03/15		
	UNITS	**SP13-205-130315**	**QC Batch**	**SP13-206-130315**	**QC Batch**	**SP13-207-130315**	**SP13-208-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	20	6656107	15	6653286	21	19	22	0.30	6656107

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FX0621	FX0624		
Sampling Date		2013/03/15	2013/03/15		
	UNITS	**SP13-206-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Calculated Parameters					
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	100	6656483
HEPH (C19-C32 less PAH)	mg/kg	<100	<100	100	6656483
Hydrocarbons					
EPH (C10-C19)	mg/kg	<100	<100	100	6663347
EPH (C19-C32)	mg/kg	<100	<100	100	6663347
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	97	99		6663347

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FX0621	FX0624		
Sampling Date		2013/03/15	2013/03/15		
	UNITS	**SP13-206-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	6656480
Volatiles					
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	0.10	6660671
Benzene	mg/kg	<0.0050	<0.0050	0.0050	6660671
Toluene	mg/kg	<0.020	<0.020	0.020	6660671
Ethylbenzene	mg/kg	<0.010	<0.010	0.010	6660671
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	6660671
o-Xylene	mg/kg	<0.040	<0.040	0.040	6660671
Styrene	mg/kg	<0.030	<0.030	0.030	6660671
Xylenes (Total)	mg/kg	<0.040	<0.040	0.040	6660671
(C6-C10)	mg/kg	<10	<10	10	6660671
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	95	94		6660671
4-BROMOFLUOROBENZENE (sur.)	%	94	94		6660671
D10-ETHYLBENZENE (sur.)	%	117	117		6660671
D4-1,2-DICHLOROETHANE (sur.)	%	110	111		6660671

RDL = Reportable Detection Limit

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FX0620	FX0621	FX0622	FX0623	FX0624		
Sampling Date		2013/03/15	2013/03/15	2013/03/15	2013/03/15	2013/03/15		
	UNITS	**SP13-205-130315**	**SP13-206-130315**	**SP13-207-130315**	**SP13-208-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	7.74	7.58	7.49	7.72	7.46	0.010	6656735
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	22800	21400	21100	21300	21700	100	6656734
Total Antimony (Sb)	mg/kg	1.07	0.60	1.27	0.82	0.94	0.10	6656734
Total Arsenic (As)	mg/kg	6.79	5.96	7.22	6.41	6.38	0.50	6656734
Total Barium (Ba)	mg/kg	84.8	85.3	87.4	82.6	91.2	0.10	6656734
Total Beryllium (Be)	mg/kg	<0.40	0.42	<0.40	0.43	<0.40	0.40	6656734
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6656734
Total Cadmium (Cd)	mg/kg	0.207	0.191	0.170	0.194	0.214	0.050	6656734
Total Calcium (Ca)	mg/kg	10900	8960	7430	7950	11200	100	6656734
Total Chromium (Cr)	mg/kg	33.5	35.4	30.4	32.8	32.0	1.0	6656734
Total Cobalt (Co)	mg/kg	11.8	10.4	11.1	11.8	11.8	0.30	6656734
Total Copper (Cu)	mg/kg	35.6	29.7	31.7	39.4	38.4	0.50	6656734
Total Iron (Fe)	mg/kg	25500	23900	23700	25900	25400	100	6656734
Total Lead (Pb)	mg/kg	8.21	8.53	9.84	13.3	13.1	0.10	6656734
Total Lithium (Li)	mg/kg	15.9	13.9	13.0	14.4	13.8	5.0	6656734
Total Magnesium (Mg)	mg/kg	7180	6630	6220	6890	7040	100	6656734
Total Manganese (Mn)	mg/kg	592	512	499	536	580	0.20	6656734
Total Mercury (Hg)	mg/kg	0.059	<0.050	<0.050	0.054	0.077	0.050	6656734
Total Molybdenum (Mo)	mg/kg	1.73	1.59	1.26	1.22	1.19	0.10	6656734
Total Nickel (Ni)	mg/kg	27.8	24.8	24.6	26.8	26.1	0.80	6656734
Total Phosphorus (P)	mg/kg	529	552	481	543	601	10	6656734
Total Potassium (K)	mg/kg	658	624	618	643	673	100	6656734
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6656734
Total Silver (Ag)	mg/kg	0.108	0.089	0.107	0.095	0.086	0.050	6656734
Total Sodium (Na)	mg/kg	208	186	171	194	190	100	6656734
Total Strontium (Sr)	mg/kg	73.0	57.0	57.4	53.7	71.1	0.10	6656734
Total Thallium (Tl)	mg/kg	0.067	0.070	0.065	0.062	0.065	0.050	6656734
Total Tin (Sn)	mg/kg	0.74	0.62	0.71	0.70	0.81	0.10	6656734
Total Titanium (Ti)	mg/kg	1020	923	889	887	1010	1.0	6656734
Total Uranium (U)	mg/kg	1.45	1.30	1.31	0.946	1.01	0.050	6656734
Total Vanadium (V)	mg/kg	71.1	66.4	65.1	70.5	71.3	2.0	6656734
Total Zinc (Zn)	mg/kg	76.3	69.9	68.7	80.3	84.1	1.0	6656734
Total Zirconium (Zr)	mg/kg	2.98	2.95	2.86	2.76	2.94	0.50	6656734

RDL = Reportable Detection Limit

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FX0620	FX0621	FX0622	FX0622	FX0623	FX0624		
Sampling Date		2013/03/15	2013/03/15	2013/03/15	2013/03/15	2013/03/15	2013/03/15		
	UNITS	**SP13-205-130315**	**SP13-206-130315**	**SP13-207-130315**	**SP13-207-130315 Lab-Dup**	**SP13-208-130315**	**SP13-209-130315**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.31	0.31	0.31		0.43	0.54	0.10	6656481
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10		<0.10	<0.10	0.10	6656481
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6661338
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6661338
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6661338
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6661338
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6661338
Phenanthrene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.023	0.023	0.020	6661338
Anthracene	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0045	0.0040	6661338
Fluoranthene	mg/kg	<0.020	0.022	0.021	<0.020	0.036	0.045	0.020	6661338
Pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.032	0.041	0.020	6661338
Benzo(a)anthracene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6661338
Chrysene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.022	0.029	0.020	6661338
Benzo(b&j)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.028	0.039	0.020	6661338
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6661338
Benzo(a)pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.024	0.020	6661338
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6661338
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6661338
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6661338
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050		<0.050	<0.050	0.050	6656482
High Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050		0.12	0.20	0.050	6656482
Total PAH	mg/kg	<0.050	<0.050	<0.050		0.14	0.23	0.050	6656482
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	94	76	85	85	87	91		6661338
D8-ACENAPHTHYLENE (sur.)	%	91	73	82	82	84	88		6661338
D8-NAPHTHALENE (sur.)	%	92	74	82	83	84	88		6661338
TERPHENYL-D14 (sur.)	%	98	79	88	89	90	94		6661338

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FX0620		FX0621		
Sampling Date		2013/03/15		2013/03/15		
	UNITS	**SP13-205-130315**	**RDL**	**SP13-206-130315**	**RDL**	**QC Batch**
ANIONS						
Soluble Sulphate (SO4)	mg/L	47	10	47	10	6669371
Soluble Chloride (Cl)	mg/L	9.8	5.0	13.3	5.0	6669301
Calculated Parameters						
Soluble Chloride (Cl)	mg/kg	5.6	2.9	6.6	2.5	6656533
Soluble Sodium (Na)	mg/kg	9.4	2.9	7.8	2.5	6656533
Soluble Parameters						
Soluble Conductivity	uS/cm	328	1.0	315	1.0	6665848
Soluble pH	pH Units	7.22	N/A	7.60	N/A	6665847
Wet Soluble Calcium (Ca)	mg/L	59.5	5.0	53.5	5.0	6667210
Saturation %	%	57.7	1.0	49.5	1.0	6665832
Wet Soluble Magnesium (Mg)	mg/L	16.4	5.0	14.7	5.0	6667210
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	6667210
Wet Soluble Sodium (Na)	mg/L	16.2	5.0	15.8	5.0	6667210
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	6667210
Sodium Adsorption Ratio	N/A	0.48	0.10	0.49	0.10	6656532

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FX0622		FX0623	FX0624	FX0624		
Sampling Date		2013/03/15		2013/03/15	2013/03/15	2013/03/15		
	UNITS	**SP13-207-130315**	**RDL**	**SP13-208-130315**	**SP13-209-130315**	**SP13-209-130315 Lab-Dup**	**RDL**	**QC Batch**
ANIONS								
Soluble Sulphate (SO4)	mg/L	48	10	36	68	68	10	6669371
Soluble Chloride (Cl)	mg/L	14.6	5.0	9.0	15.7	16.2	5.0	6669301
Calculated Parameters								
Soluble Chloride (Cl)	mg/kg	7.7	2.6	4.9	8.5		2.7	6656533
Soluble Sodium (Na)	mg/kg	8.6	2.6	7.4	10.9		2.7	6656533
Soluble Parameters								
Soluble Conductivity	uS/cm	352	1.0	277	440	434	1.0	6665848
Soluble pH	pH Units	6.98	N/A	7.24	7.05	7.05	N/A	6665847
Wet Soluble Calcium (Ca)	mg/L	59.9	5.0	50.3	80.7	80.5	5.0	6667210
Saturation %	%	52.9	1.0	54.1	54.4	53.6	1.0	6665832
Wet Soluble Magnesium (Mg)	mg/L	16.6	5.0	14.2	15.1	15.0	5.0	6667210
Wet Soluble Potassium (K)	mg/L	<20	20	<20	<20	<20	20	6667210
Wet Soluble Sodium (Na)	mg/L	16.2	5.0	13.6	20.1	19.7	5.0	6667210
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	<30	<30	30	6667210
Sodium Adsorption Ratio	N/A	0.48	0.10	0.44	0.54		0.10	6656532

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	1.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

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Success Through Science®

Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6653286	Moisture	2013/03/18					<0.30	%	6.9	20		
6656107	Moisture	2013/03/18					<0.30	%	0.7	20		
6656734	Total Antimony (Sb)	2013/03/18	90	75 - 125	90	75 - 125	<0.10	mg/kg	NC	30	105	70 - 130
6656734	Total Arsenic (As)	2013/03/18	95	75 - 125	88	75 - 125	<0.50	mg/kg	11.5	30	102	70 - 130
6656734	Total Barium (Ba)	2013/03/18	NC	75 - 125	91	75 - 125	<0.10	mg/kg	0.1	35	100	70 - 130
6656734	Total Beryllium (Be)	2013/03/18	102	75 - 125	88	75 - 125	<0.40	mg/kg	NC	30		
6656734	Total Cadmium (Cd)	2013/03/18	101	75 - 125	92	75 - 125	<0.050	mg/kg	NC	30	110	70 - 130
6656734	Total Chromium (Cr)	2013/03/18	91	75 - 125	90	75 - 125	<1.0	mg/kg	1.4	30	98	70 - 130
6656734	Total Cobalt (Co)	2013/03/18	95	75 - 125	91	75 - 125	<0.30	mg/kg	0.6	30	95	70 - 130
6656734	Total Copper (Cu)	2013/03/18	92	75 - 125	95	75 - 125	<0.50	mg/kg	0.4	30	91	70 - 130
6656734	Total Lead (Pb)	2013/03/18	100	75 - 125	94	75 - 125	<0.10	mg/kg	1.4	35	100	70 - 130
6656734	Total Lithium (Li)	2013/03/18	102	75 - 125	92	75 - 125	<5.0	mg/kg				
6656734	Total Manganese (Mn)	2013/03/18	NC	75 - 125	92	75 - 125	<0.20	mg/kg	0.2	30	100	70 - 130
6656734	Total Mercury (Hg)	2013/03/18	102	75 - 125	88	75 - 125	<0.050	mg/kg	NC	35	97	70 - 130
6656734	Total Molybdenum (Mo)	2013/03/18	102	75 - 125	94	75 - 125	<0.10	mg/kg	NC	35	101	70 - 130
6656734	Total Nickel (Ni)	2013/03/18	NC	75 - 125	92	75 - 125	<0.80	mg/kg	0.6	30	93	70 - 130
6656734	Total Selenium (Se)	2013/03/18	105	75 - 125	89	75 - 125	<0.50	mg/kg	NC	30		
6656734	Total Silver (Ag)	2013/03/18	102	75 - 125	91	75 - 125	<0.050	mg/kg	NC	35		
6656734	Total Strontium (Sr)	2013/03/18	95	75 - 125	94	75 - 125	<0.10	mg/kg	1.5	35	108	70 - 130
6656734	Total Thallium (Tl)	2013/03/18	93	75 - 125	89	75 - 125	<0.050	mg/kg	NC	30	92	70 - 130
6656734	Total Tin (Sn)	2013/03/18	93	75 - 125	89	75 - 125	<0.10	mg/kg	NC	35		
6656734	Total Titanium (Ti)	2013/03/18	NC	75 - 125	93	75 - 125	<1.0	mg/kg	0.4	35	101	70 - 130
6656734	Total Uranium (U)	2013/03/18	99	75 - 125	93	75 - 125	<0.050	mg/kg			105	70 - 130
6656734	Total Vanadium (V)	2013/03/18	NC	75 - 125	90	75 - 125	<2.0	mg/kg	2.3	30	101	70 - 130
6656734	Total Zinc (Zn)	2013/03/18	NC	75 - 125	93	75 - 125	<1.0	mg/kg	0.3	30	100	70 - 130
6656734	Total Aluminum (Al)	2013/03/18					<100	mg/kg	1.2	35	100	70 - 130
6656734	Total Calcium (Ca)	2013/03/18					<100	mg/kg	2.7	30	88	70 - 130
6656734	Total Iron (Fe)	2013/03/18					<100	mg/kg	0.3	30	89	70 - 130
6656734	Total Magnesium (Mg)	2013/03/18					<100	mg/kg	1.3	30	94	70 - 130
6656734	Total Phosphorus (P)	2013/03/18					<10	mg/kg	0.6	30	96	70 - 130
6656734	Total Bismuth (Bi)	2013/03/18					<0.10	mg/kg	NC	30		
6656734	Total Potassium (K)	2013/03/18					<100	mg/kg	NC	35		
6656734	Total Sodium (Na)	2013/03/18					<100	mg/kg	NC	35		
6656734	Total Zirconium (Zr)	2013/03/18					<0.50	mg/kg	4.1	30		
6656735	Soluble (2:1) pH	2013/03/18			102	96 - 104			2.1	20		
6657609	200 mesh (>.075 mm)	2013/03/18							4.3	35		
6657609	200 mesh (<.075 mm)	2013/03/18							4.9	35		
6660671	1,4-Difluorobenzene (sur.)	2013/03/18	97	70 - 130	94	70 - 130	98	%				
6660671	4-BROMOFLUOROBENZENE (sur.)	2013/03/18	100	70 - 130	95	70 - 130	93	%				

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6660671	D10-ETHYLBENZENE (sur.)	2013/03/18	106	50 - 130	106	50 - 130	118	%				
6660671	D4-1,2-DICHLOROETHANE (sur.)	2013/03/18	102	70 - 130	108	70 - 130	111	%				
6660671	Benzene	2013/03/18	102	60 - 140	103	60 - 140	<0.0050	mg/kg				
6660671	Toluene	2013/03/18	122	60 - 140	124	60 - 140	<0.020	mg/kg				
6660671	Ethylbenzene	2013/03/18	110	60 - 140	111	60 - 140	<0.010	mg/kg				
6660671	m & p-Xylene	2013/03/18	110	60 - 140	110	60 - 140	<0.040	mg/kg				
6660671	o-Xylene	2013/03/18	112	60 - 140	111	60 - 140	<0.040	mg/kg				
6660671	(C6-C10)	2013/03/18			98	60 - 140	<10	mg/kg				
6660671	Methyl-tert-butylether(MTBE)	2013/03/18					<0.10	mg/kg				
6660671	Styrene	2013/03/18					<0.030	mg/kg				
6660671	Xylenes (Total)	2013/03/18					<0.040	mg/kg				
6661338	D10-ANTHRACENE (sur.)	2013/03/18	92	60 - 130	97	60 - 130	84	%				
6661338	D8-ACENAPHTHYLENE (sur.)	2013/03/18	91	50 - 130	93	50 - 130	82	%				
6661338	D8-NAPHTHALENE (sur.)	2013/03/18	91	50 - 130	94	50 - 130	83	%				
6661338	TERPHENYL-D14 (sur.)	2013/03/18	97	60 - 130	99	60 - 130	85	%				
6661338	Naphthalene	2013/03/18	88	50 - 130	87	50 - 130	<0.010	mg/kg	NC	50		
6661338	2-Methylnaphthalene	2013/03/18	87	50 - 130	84	50 - 130	<0.020	mg/kg	NC	50		
6661338	Acenaphthylene	2013/03/18	90	50 - 130	89	50 - 130	<0.0050	mg/kg	NC	50		
6661338	Acenaphthene	2013/03/18	92	50 - 130	89	50 - 130	<0.0050	mg/kg	NC	50		
6661338	Fluorene	2013/03/18	93	50 - 130	90	50 - 130	<0.020	mg/kg	NC	50		
6661338	Phenanthrene	2013/03/18	90	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6661338	Anthracene	2013/03/18	94	60 - 130	92	60 - 130	<0.0040	mg/kg	NC	50		
6661338	Fluoranthene	2013/03/18	96	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
6661338	Pyrene	2013/03/18	92	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(a)anthracene	2013/03/18	92	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6661338	Chrysene	2013/03/18	93	60 - 130	94	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(b&j)fluoranthene	2013/03/18	98	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(k)fluoranthene	2013/03/18	95	60 - 130	97	60 - 130	<0.020	mg/kg	NC	50		
6661338	Benzo(a)pyrene	2013/03/18	98	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
6661338	Indeno(1,2,3-cd)pyrene	2013/03/18	107	60 - 130	94	60 - 130	<0.050	mg/kg	NC	50		
6661338	Dibenz(a,h)anthracene	2013/03/18	107	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
6661338	Benzo(g,h,i)perylene	2013/03/18	100	60 - 130	90	60 - 130	<0.050	mg/kg	NC	50		
6661593	O-TERPHENYL (sur.)	2013/03/19	89	50 - 130	90	50 - 130	90	%				
6661593	F2 (C10-C16 Hydrocarbons)	2013/03/19	83	50 - 130	83	80 - 120	<10	mg/kg	NC	40		
6661593	F3 (C16-C34 Hydrocarbons)	2013/03/19	90	50 - 130	87	80 - 120	<10	mg/kg	15.6	40		
6661593	F4 (C34-C50 Hydrocarbons)	2013/03/19	88	50 - 130	88	80 - 120	<10	mg/kg	NC	40		
6661593	Reached Baseline at C50	2013/03/19							NC	50		
6663347	O-TERPHENYL (sur.)	2013/03/19	103	50 - 130	111	50 - 130	111	%				
6663347	EPH (C10-C19)	2013/03/19	106	50 - 130	106	50 - 130	<100	mg/kg	NC	40		

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Maxxam Job #: B320914
Report Date: 2013/03/20

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6663347	EPH (C19-C32)	2013/03/19	94	50 - 130	94	50 - 130	<100	mg/kg	NC	40		
6665832	Saturation %	2013/03/20			103	80 - 120	<1.0	%	1.5	30		
6665847	Soluble pH	2013/03/20			103	97 - 103			0	20		
6665848	Soluble Conductivity	2013/03/20			97	70 - 130	<1.0	uS/cm	1.4	35		
6667210	Wet Soluble Calcium (Ca)	2013/03/20					<5.0	mg/L	0.2	30		
6667210	Wet Soluble Magnesium (Mg)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Potassium (K)	2013/03/20					<20	mg/L	NC	30		
6667210	Wet Soluble Sodium (Na)	2013/03/20					<5.0	mg/L	NC	30		
6667210	Wet Soluble Sulphur (S)	2013/03/20					<30	mg/L	NC	30		
6669301	Soluble Chloride (Cl)	2013/03/20					<5.0	mg/L	NC	30		
6669371	Soluble Sulphate (SO4)	2013/03/20					<10	mg/L	0.2	30		

N/A = Not Applicable
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B320914	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#054772-17-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	ME		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS: Pls. note condition of custody Sol.

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FX0620	SP13-205-130315	13-03-15	AM	Soil				X	X			X				2	
2	FX0621	-206-	↓	↓	↓		X	X	X	X	X		X				↓	
3	FX0622	-207-							X	X		X	X					
4	FX0623	-208-							X	X			X					
5	FX0624	-209-					X	X	X	X	X		X					
6																		
7																		
8																		
9																		
10																		

B320914

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
MARK EDWARDS /	13/03/15	11:30	Nained Amor	13/03/16	09:45		[ ]	1, 1, 1	[✓] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

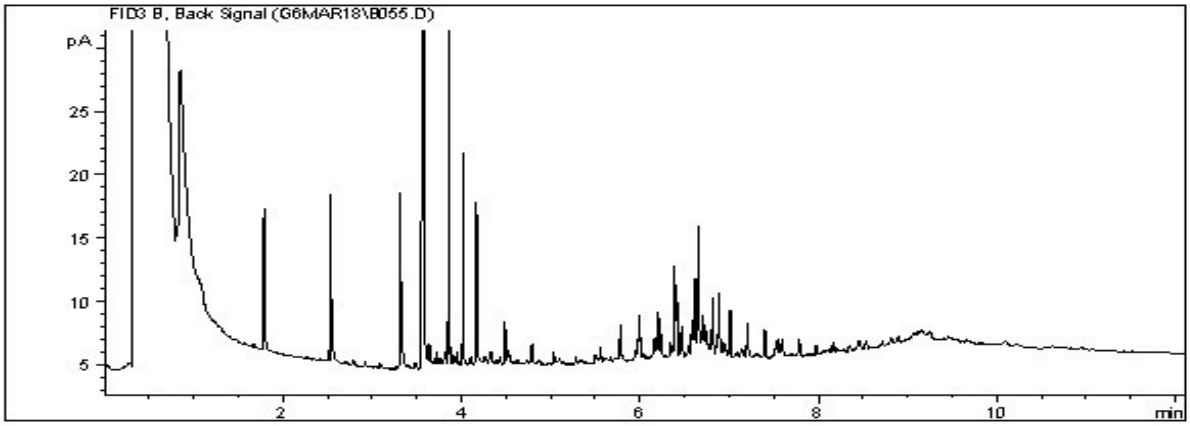
Maxxam Analytics International Corporation o/a Maxxam Analytics

INTACT

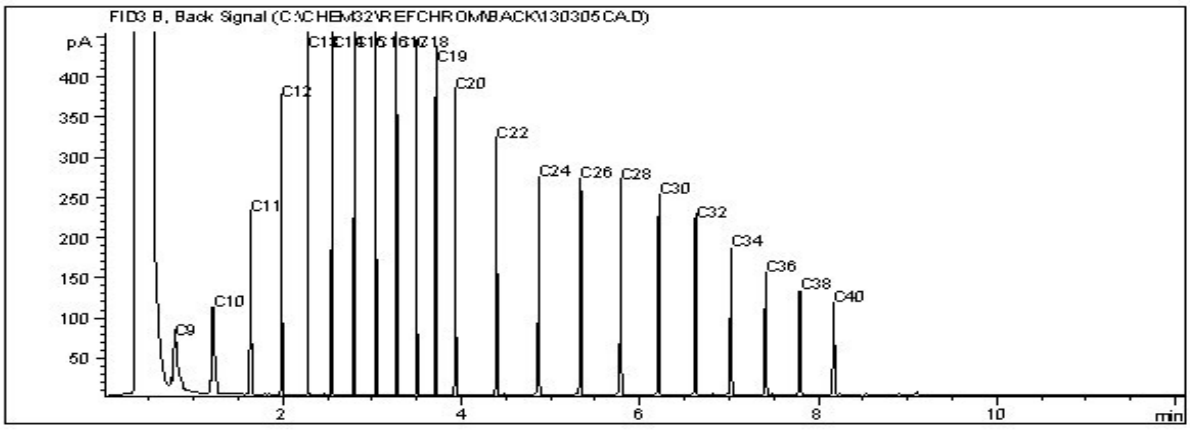
Report Date: 2013/03/20
Maxxam Job #: B320914
Maxxam Sample: FX0621

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-206-130315

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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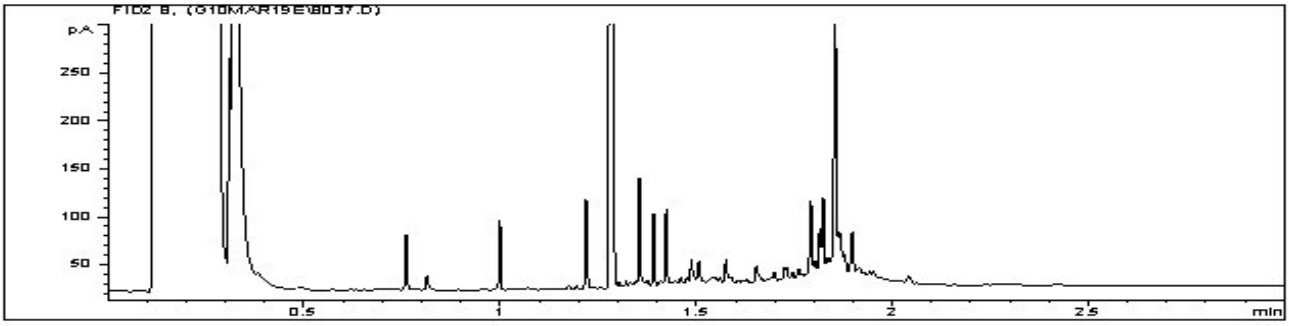
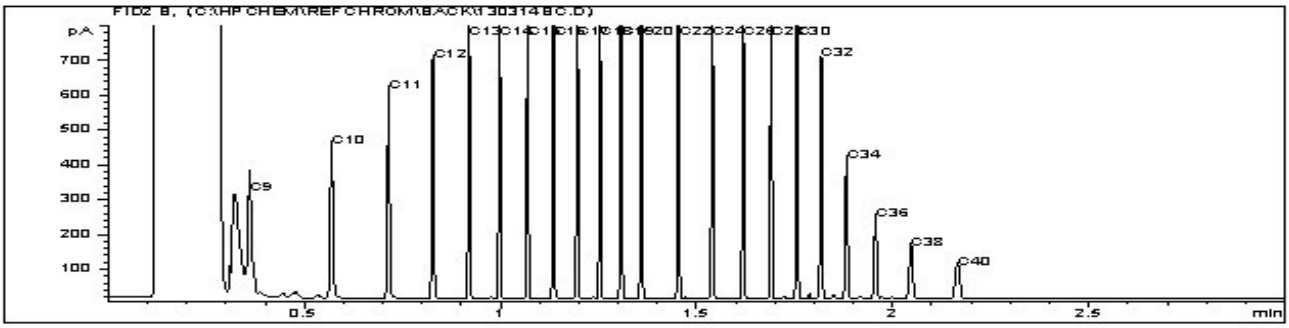
Report Date: 2013/03/20
Maxxam Job #: B320914
Maxxam Sample: FX0621

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-206-130315

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4	-	C12	Diesel:	C8	-	C22
Varsol:	C8	-	C12	Lubricating Oils:	C20	-	C40
Kerosene:	C7	-	C16	Crude Oils:	C3	-	C60+

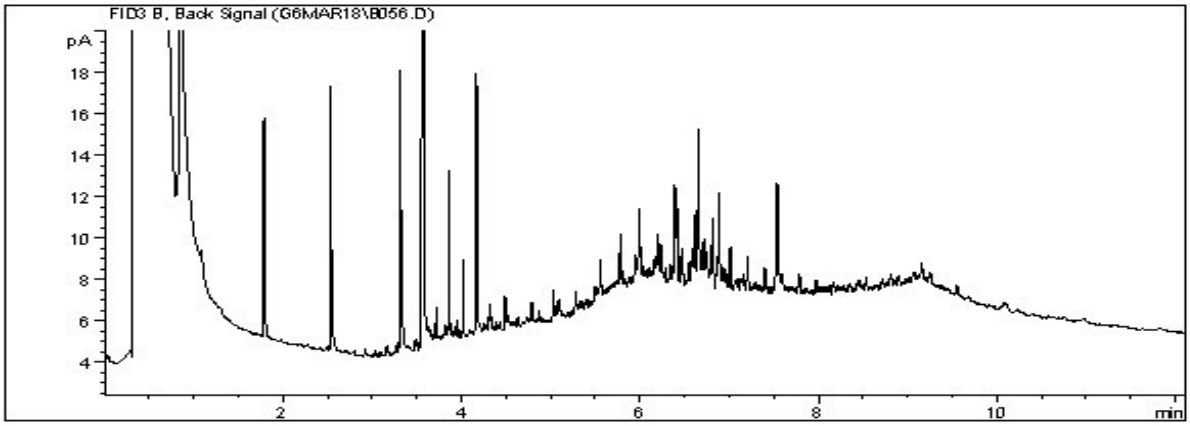
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

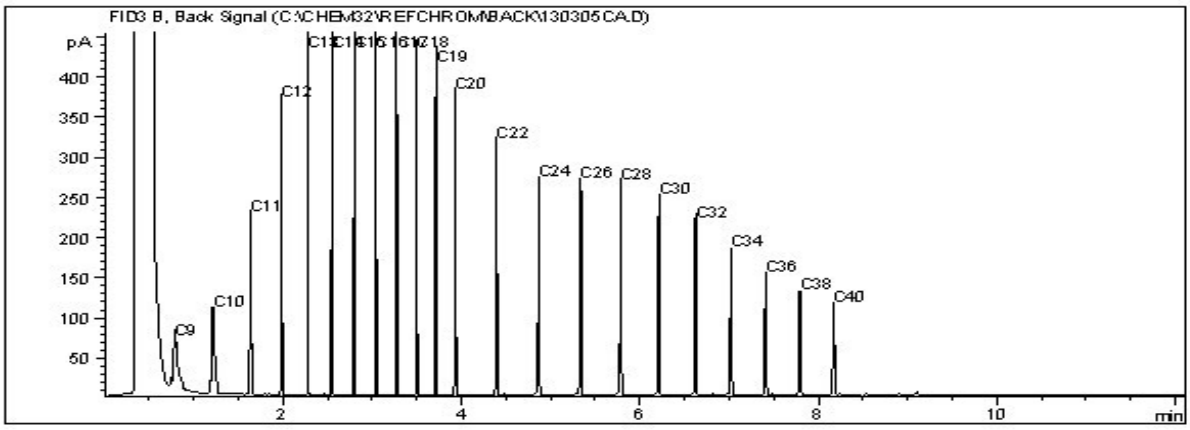
Report Date: 2013/03/20
Maxxam Job #: B320914
Maxxam Sample: FX0624

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-209-130315

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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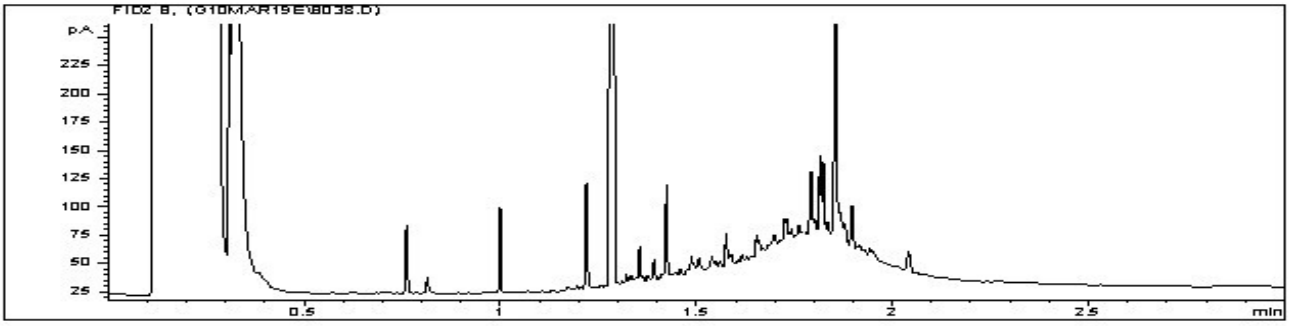
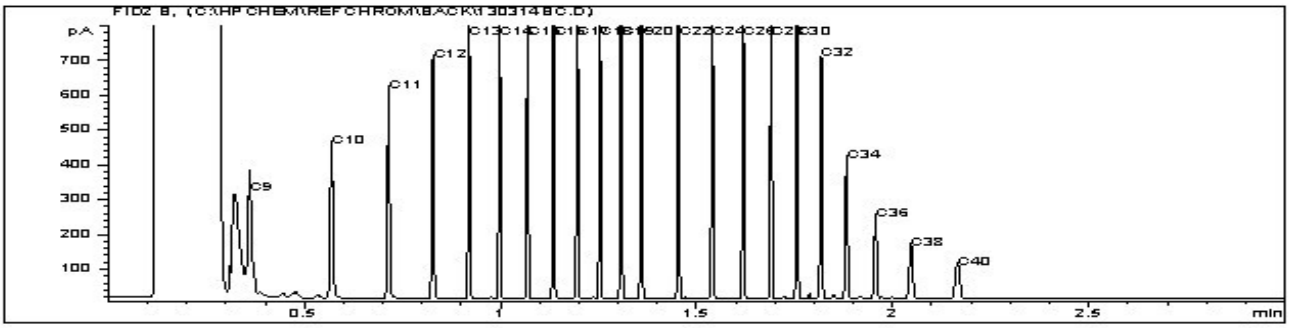
Report Date: 2013/03/20
Maxxam Job #: B320914
Maxxam Sample: FX0624

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-209-130315

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your C.O.C. #: 35477218, 35477219

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B323114
Received: 2013/03/23, 09:20

Sample Matrix: Soil
Samples Received: 11

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	3	2013/03/24	2013/03/24	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	10	2013/03/24	2013/03/25	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	10	2013/03/24	2013/03/25	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	3	N/A	2013/03/25	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	2	2013/03/24	2013/03/25	BBY8SOP-00030	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	1	2013/03/26	2013/03/26	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	11	2013/03/24	2013/03/25	BBY7SOP-00001	EPA 6020A
Moisture	11	N/A	2013/03/25	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	11	2013/03/24	2013/03/26	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	11	N/A	2013/03/26	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	11	N/A	2013/03/26	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	1	2013/03/24	2013/03/25	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	10	2013/03/25	2013/03/25	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	10	2013/03/24	2013/03/24	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	10	N/A	2013/03/25		
Saturated Paste	10	2013/03/24	2013/03/24	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	10	N/A	2013/03/25		
Sulphate (soluble) (soil)	10	2013/03/24	2013/03/25	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	10	N/A	2013/03/25	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	3	N/A	2013/03/26	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	3	2013/03/24	2013/03/25	BBY8SOP-00029	BC Env Lab Manual
Volatile HC-BTEX	3	N/A	2013/03/25	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Success Through Science®

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FZ0064	FZ0064	FZ0065	FZ0381		
Sampling Date		2013/03/22	2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-132-130322**	**SP13-132-130322 Lab-Dup**	**SP13-133-130322**	**SP13-214-130322**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	110	<10	10	6682241
F3 (C16-C34 Hydrocarbons)	mg/kg	77	87	420	140	10	6682241
F4 (C34-C50 Hydrocarbons)	mg/kg	44	56	200	81	10	6682241
Reached Baseline at C50	mg/kg	YES	YES	YES	YES	N/A	6682241
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	92	95	100	81		6682241

PHYSICAL TESTING (SOIL)

Maxxam ID		FZ0062	FZ0063	FZ0064		
Sampling Date		2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-130-130322**	**SP13-131-130322**	**SP13-132-130322**	**RDL**	**QC Batch**
Physical Properties						
Moisture	%	17	22	24	0.30	6680119

Maxxam ID		FZ0065		FZ0066	FZ0067	FZ0068		
Sampling Date		2013/03/22		2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-133-130322**	**QC Batch**	**SP13-134-130322**	**SP13-210-130322**	**SP13-210-01-130322**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	18	6680609	18	20	14	0.30	6680119

Maxxam ID		FZ0069	FZ0070		FZ0071	FZ0381		
Sampling Date		2013/03/22	2013/03/22		2013/03/22	2013/03/22		
	UNITS	**SP13-211-130322**	**SP13-212-130322**	**QC Batch**	**SP13-213-130322**	**SP13-214-130322**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	21	22	6680119	19	20	0.30	6680609

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FZ0064	FZ0064	FZ0065	FZ0381		
Sampling Date		2013/03/22	2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-132-130322**	**SP13-132-130322 Lab-Dup**	**SP13-133-130322**	**SP13-214-130322**	**RDL**	**QC Batch**
Calculated Parameters							
LEPH (C10-C19 less PAH)	mg/kg	<100		150	<100	100	6680514
HEPH (C19-C32 less PAH)	mg/kg	148		339	204	100	6680514
Hydrocarbons							
EPH (C10-C19)	mg/kg	<100	<100	151	<100	100	6682244
EPH (C19-C32)	mg/kg	149	263	340	205	100	6682244
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	93	93	92	96		6682244

RDL = Reportable Detection Limit

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Success Through Science®

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		FZ0064	FZ0065	FZ0381		
Sampling Date		2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-132-130322**	**SP13-133-130322**	**SP13-214-130322**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	10	6680512
Volatiles						
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	<10	10	6680503
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	<0.10	0.10	6680930
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	0.0050	6680930
Toluene	mg/kg	<0.020	<0.020	<0.020	0.020	6680930
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	0.010	6680930
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	6680930
o-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	6680930
Styrene	mg/kg	<0.030	<0.030	<0.030	0.030	6680930
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	0.040	6680930
VH C6-C10	mg/kg	<10	<10	<10	10	6680930
(C6-C10)	mg/kg	<10	<10	<10	10	6680930
Surrogate Recovery (%)						
1,4-Difluorobenzene (sur.)	%	96	96	97		6680930
4-BROMOFLUOROBENZENE (sur.)	%	101	100	100		6680930
D10-ETHYLBENZENE (sur.)	%	108	111	111		6680930
D4-1,2-DICHLOROETHANE (sur.)	%	104	107	107		6680930

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ0062	FZ0063	FZ0064	FZ0065	FZ0066	FZ0067		
Sampling Date		2013/03/22	2013/03/22	2013/03/22	2013/03/22	2013/03/22	2013/03/22		
	UNITS	**SP13-130-130322**	**SP13-131-130322**	**SP13-132-130322**	**SP13-133-130322**	**SP13-134-130322**	**SP13-210-130322**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	6.96	6.93	7.11	6.94	6.99	7.70	0.010	6680809
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20200	20500	21300	18600	18400	19900	100	6680808
Total Antimony (Sb)	mg/kg	41.0	13.7	17.7	18.8	20.7	3.58	0.10	6680808
Total Arsenic (As)	mg/kg	77.9	31.7	40.5	40.6	41.7	9.71	0.50	6680808
Total Barium (Ba)	mg/kg	110	162	116	106	98.0	76.6	0.10	6680808
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	6680808
Total Bismuth (Bi)	mg/kg	0.24	0.13	0.14	0.15	0.17	<0.10	0.10	6680808
Total Cadmium (Cd)	mg/kg	0.443	0.337	0.604	0.354	0.375	0.313	0.050	6680808
Total Calcium (Ca)	mg/kg	8550	9870	7450	10100	12000	17400	100	6680808
Total Chromium (Cr)	mg/kg	38.2	40.8	37.0	36.8	43.3	30.1	1.0	6680808
Total Cobalt (Co)	mg/kg	14.3	12.1	12.8	13.0	12.6	10.4	0.30	6680808
Total Copper (Cu)	mg/kg	135	71.2	77.1	110	116	42.1	0.50	6680808
Total Iron (Fe)	mg/kg	27700	25100	26400	27500	25500	23200	100	6680808
Total Lead (Pb)	mg/kg	90.0	57.3	44.7	53.6	54.4	16.6	0.10	6680808
Total Lithium (Li)	mg/kg	12.6	12.8	13.6	12.9	12.6	14.5	5.0	6680808
Total Magnesium (Mg)	mg/kg	7290	7320	6860	7200	7470	8320	100	6680808
Total Manganese (Mn)	mg/kg	507	526	711	558	460	470	0.20	6680808
Total Mercury (Hg)	mg/kg	0.202	0.139	0.132	0.114	0.172	0.069	0.050	6680808
Total Molybdenum (Mo)	mg/kg	3.40	2.04	1.91	2.85	3.53	3.11	0.10	6680808
Total Nickel (Ni)	mg/kg	30.2	28.3	27.6	28.3	30.3	24.7	0.80	6680808
Total Phosphorus (P)	mg/kg	650	748	895	558	594	459	10	6680808
Total Potassium (K)	mg/kg	641	627	831	580	593	529	100	6680808
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6680808
Total Silver (Ag)	mg/kg	0.209	0.121	0.159	0.143	0.156	0.090	0.050	6680808
Total Sodium (Na)	mg/kg	339	235	204	298	269	349	100	6680808
Total Strontium (Sr)	mg/kg	55.8	49.6	45.1	68.8	76.9	107	0.10	6680808
Total Thallium (Tl)	mg/kg	0.086	0.073	0.077	0.068	0.059	0.052	0.050	6680808
Total Tin (Sn)	mg/kg	7.83	3.80	3.84	4.45	4.92	1.22	0.10	6680808
Total Titanium (Ti)	mg/kg	885	783	844	879	832	881	1.0	6680808
Total Uranium (U)	mg/kg	1.08	0.694	0.690	0.780	0.797	1.69	0.050	6680808
Total Vanadium (V)	mg/kg	68.2	64.6	65.6	67.2	64.7	62.0	2.0	6680808
Total Zinc (Zn)	mg/kg	441	223	259	281	267	90.8	1.0	6680808
Total Zirconium (Zr)	mg/kg	3.46	3.17	3.06	2.92	2.65	3.14	0.50	6680808

RDL = Reportable Detection Limit

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ0068	FZ0069	FZ0070	FZ0071		FZ0381		
Sampling Date		2013/03/22	2013/03/22	2013/03/22	2013/03/22		2013/03/22		
	UNITS	**SP13-210-01-130322**	**SP13-211-130322**	**SP13-212-130322**	**SP13-213-130322**	**QC Batch**	**SP13-214-130322**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	6.92	7.61	6.92	6.92	6680809	7.75	0.010	6680816
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	19800	20100	21600	19400	6680808	17400	100	6680812
Total Antimony (Sb)	mg/kg	5.97	4.02	9.00	2.10	6680808	2.85	0.10	6680812
Total Arsenic (As)	mg/kg	15.0	11.8	23.8	9.11	6680808	9.32	0.50	6680812
Total Barium (Ba)	mg/kg	83.7	80.9	82.1	72.2	6680808	67.8	0.10	6680812
Total Beryllium (Be)	mg/kg	<0.40	0.48	<0.40	<0.40	6680808	<0.40	0.40	6680812
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	0.13	<0.10	6680808	<0.10	0.10	6680812
Total Cadmium (Cd)	mg/kg	0.304	0.302	0.376	0.320	6680808	0.299	0.050	6680812
Total Calcium (Ca)	mg/kg	17000	16100	22100	18700	6680808	13700	100	6680812
Total Chromium (Cr)	mg/kg	31.7	38.1	32.1	30.7	6680808	29.6	1.0	6680812
Total Cobalt (Co)	mg/kg	11.1	12.0	12.0	9.74	6680808	9.70	0.30	6680812
Total Copper (Cu)	mg/kg	49.2	47.3	54.8	41.2	6680808	44.0	0.50	6680812
Total Iron (Fe)	mg/kg	24100	23700	24900	22100	6680808	22300	100	6680812
Total Lead (Pb)	mg/kg	22.6	26.1	26.0	13.2	6680808	16.3	0.10	6680812
Total Lithium (Li)	mg/kg	14.8	14.5	17.3	14.6	6680808	13.9	5.0	6680812
Total Magnesium (Mg)	mg/kg	8280	7880	9540	8350	6680808	7620	100	6680812
Total Manganese (Mn)	mg/kg	470	514	497	423	6680808	447	0.20	6680812
Total Mercury (Hg)	mg/kg	0.076	0.064	0.070	0.052	6680808	0.070	0.050	6680812
Total Molybdenum (Mo)	mg/kg	3.16	3.24	6.47	4.18	6680808	3.91	0.10	6680812
Total Nickel (Ni)	mg/kg	25.9	26.4	27.3	23.2	6680808	21.6	0.80	6680812
Total Phosphorus (P)	mg/kg	481	408	364	345	6680808	383	10	6680812
Total Potassium (K)	mg/kg	528	552	496	505	6680808	514	100	6680812
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6680808	<0.50	0.50	6680812
Total Silver (Ag)	mg/kg	0.098	0.093	0.134	0.110	6680808	0.090	0.050	6680812
Total Sodium (Na)	mg/kg	333	299	386	394	6680808	373	100	6680812
Total Strontium (Sr)	mg/kg	120	116	176	135	6680808	98.9	0.10	6680812
Total Thallium (Tl)	mg/kg	0.063	0.061	0.078	0.059	6680808	<0.050	0.050	6680812
Total Tin (Sn)	mg/kg	1.36	1.00	1.61	0.81	6680808	0.82	0.10	6680812
Total Titanium (Ti)	mg/kg	845	845	897	869	6680808	836	1.0	6680812
Total Uranium (U)	mg/kg	1.75	1.76	2.46	2.01	6680808	1.70	0.050	6680812
Total Vanadium (V)	mg/kg	63.1	63.9	65.1	60.4	6680808	59.8	2.0	6680812
Total Zinc (Zn)	mg/kg	111	103	134	73.2	6680808	77.3	1.0	6680812
Total Zirconium (Zr)	mg/kg	3.31	3.43	3.91	3.49	6680808	3.38	0.50	6680812

RDL = Reportable Detection Limit

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ0062	FZ0063	FZ0064	FZ0064		FZ0065		
Sampling Date		2013/03/22	2013/03/22	2013/03/22	2013/03/22		2013/03/22		
	UNITS	**SP13-130-130322**	**SP13-131-130322**	**SP13-132-130322**	**SP13-132-130322 Lab-Dup**	**RDL**	**SP13-133-130322**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	2.8	1.6	3.2		0.10	1.9	0.10	6680481
Benzo[a]pyrene equivalency	N/A	0.23	0.14	0.27		0.10	0.16	0.10	6680481
Polycyclic Aromatics									
Naphthalene	mg/kg	0.035	0.013	0.013	0.016	0.010	0.034	0.010	6682218
2-Methylnaphthalene	mg/kg	0.021	<0.020	<0.020	<0.020	0.020	0.055	0.020	6682218
Acenaphthylene	mg/kg	0.018	0.015	0.039 (1)	0.021	0.0050	0.027	0.0050	6682218
Acenaphthene	mg/kg	0.053	0.013	0.010	0.015	0.0050	<0.10 (2)	0.10	6682218
Fluorene	mg/kg	0.049	<0.020	<0.020	<0.020	0.020	0.093	0.020	6682218
Phenanthrene	mg/kg	0.34	0.11	0.096	0.13	0.020	0.31	0.020	6682218
Anthracene	mg/kg	0.082	0.028	0.039	0.040	0.0040	0.068	0.0040	6682218
Fluoranthene	mg/kg	0.40	0.17	0.26	0.21	0.020	0.21	0.020	6682218
Pyrene	mg/kg	0.33	0.16	0.26 (3)	0.75 (4)	0.020	0.26	0.020	6682218
Benzo(a)anthracene	mg/kg	0.15	0.073	0.17	0.12	0.020	0.10	0.020	6682218
Chrysene	mg/kg	0.17	0.098	0.21	0.16	0.020	0.16	0.020	6682218
Benzo(b&j)fluoranthene	mg/kg	0.21	0.12	0.24	0.21	0.020	0.13	0.020	6682218
Benzo(k)fluoranthene	mg/kg	0.062	0.039	0.073	0.056	0.020	0.042	0.020	6682218
Benzo(a)pyrene	mg/kg	0.15	0.085	0.18	0.16	0.020	0.099	0.020	6682218
Indeno(1,2,3-cd)pyrene	mg/kg	0.084	0.051	0.089	0.091	0.050	<0.050	0.050	6682218
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	<0.050	0.050	6682218
Benzo(g,h,i)perylene	mg/kg	0.084	0.051	0.089	0.091	0.050	<0.050	0.050	6682218
Low Molecular Weight PAH`s	mg/kg	0.60	0.18	0.20		0.050	0.59	0.10	6680482
High Molecular Weight PAH`s	mg/kg	1.8	0.92	1.7		0.050	1.1	0.050	6680482
Total PAH	mg/kg	2.4	1.1	1.9		0.050	1.7	0.10	6680482
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	81	76	89	94		92		6682218
D8-ACENAPHTHYLENE (sur.)	%	75	71	85	89		87		6682218
D8-NAPHTHALENE (sur.)	%	78	72	85	90		89		6682218
TERPHENYL-D14 (sur.)	%	81	77	90	94		94		6682218

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit - Increased variability of results
(2) - RDL raised due to sample matrix interference.
(3) - Duplicate RPD above control limit - Increased variability of results
(4) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam

Success Through Science®

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ0066		FZ0067		FZ0068		FZ0069		
Sampling Date		2013/03/22		2013/03/22		2013/03/22		2013/03/22		
	UNITS	**SP13-134-130322**	**RDL**	**SP13-210-130322**	**RDL**	**SP13-210-01-130322**	**RDL**	**SP13-211-130322**	**RDL**	**QC Batch**
Calculated Parameters										
Index of Additive Cancer Risk(IARC)	N/A	1.9	0.10	0.51	0.10	0.76	0.10	0.60	0.10	6680481
Benzo[a]pyrene equivalency	N/A	0.16	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	6680481
Polycyclic Aromatics										
Naphthalene	mg/kg	0.022	0.010	<0.010	0.010	0.016	0.010	0.013	0.010	6682218
2-Methylnaphthalene	mg/kg	0.039	0.020	<0.020	0.020	0.044	0.020	0.035	0.020	6682218
Acenaphthylene	mg/kg	0.021	0.0050	<0.0050	0.0050	0.0086	0.0050	0.0071	0.0050	6682218
Acenaphthene	mg/kg	<0.033(1)	0.033	<0.0060(1)	0.0060	<0.016(1)	0.016	<0.011(1)	0.011	6682218
Fluorene	mg/kg	0.036	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	6682218
Phenanthrene	mg/kg	0.17	0.020	0.030	0.020	0.071	0.020	0.050	0.020	6682218
Anthracene	mg/kg	0.045	0.0040	0.0066	0.0040	0.015	0.0040	0.011	0.0040	6682218
Fluoranthene	mg/kg	0.19	0.020	0.035	0.020	0.069	0.020	0.052	0.020	6682218
Pyrene	mg/kg	0.20	0.020	0.065	0.020	0.13	0.020	0.077	0.020	6682218
Benzo(a)anthracene	mg/kg	0.095	0.020	<0.020	0.020	0.031	0.020	0.026	0.020	6682218
Chrysene	mg/kg	0.13	0.020	0.076	0.020	0.059	0.020	0.043	0.020	6682218
Benzo(b&j)fluoranthene	mg/kg	0.14	0.020	0.033	0.020	0.055	0.020	0.039	0.020	6682218
Benzo(k)fluoranthene	mg/kg	0.038	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	6682218
Benzo(a)pyrene	mg/kg	0.10	0.020	0.021	0.020	0.040	0.020	0.029	0.020	6682218
Indeno(1,2,3-cd)pyrene	mg/kg	0.056	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Benzo(g,h,i)perylene	mg/kg	0.056	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Low Molecular Weight PAH`s	mg/kg	0.33	0.050	<0.050	0.050	0.15	0.050	0.12	0.050	6680482
High Molecular Weight PAH`s	mg/kg	1.1	0.050	0.25	0.050	0.42	0.050	0.29	0.050	6680482
Total PAH	mg/kg	1.4	0.050	0.29	0.050	0.57	0.050	0.41	0.050	6680482
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	92		91		83		83		6682218
D8-ACENAPHTHYLENE (sur.)	%	86		85		77		78		6682218
D8-NAPHTHALENE (sur.)	%	88		85		81		79		6682218
TERPHENYL-D14 (sur.)	%	94		93		85		85		6682218

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ0070		FZ0071		FZ0381		
Sampling Date		2013/03/22		2013/03/22		2013/03/22		
	UNITS	**SP13-212-130322**	**RDL**	**SP13-213-130322**	**RDL**	**SP13-214-130322**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	0.56	0.10	0.40	0.10	0.42	0.10	6680481
Benzo[a]pyrene equivalency	N/A	<0.10	0.10	<0.10	0.10	<0.10	0.10	6680481
Polycyclic Aromatics								
Naphthalene	mg/kg	0.014	0.010	0.013	0.010	<0.010	0.010	6682218
2-Methylnaphthalene	mg/kg	0.042	0.020	0.040	0.020	0.023	0.020	6682218
Acenaphthylene	mg/kg	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.0050	6682218
Acenaphthene	mg/kg	<0.013(1)	0.013	<0.010(1)	0.010	<0.0080(1)	0.0080	6682218
Fluorene	mg/kg	<0.020	0.020	<0.020	0.020	<0.020	0.020	6682218
Phenanthrene	mg/kg	0.047	0.020	0.039	0.020	0.026	0.020	6682218
Anthracene	mg/kg	0.0095	0.0040	0.0071	0.0040	0.0054	0.0040	6682218
Fluoranthene	mg/kg	0.043	0.020	0.030	0.020	0.028	0.020	6682218
Pyrene	mg/kg	0.081	0.020	0.053	0.020	0.058	0.020	6682218
Benzo(a)anthracene	mg/kg	0.021	0.020	<0.020	0.020	<0.020	0.020	6682218
Chrysene	mg/kg	0.039	0.020	0.031	0.020	0.028	0.020	6682218
Benzo(b&j)fluoranthene	mg/kg	0.035	0.020	0.024	0.020	0.027	0.020	6682218
Benzo(k)fluoranthene	mg/kg	<0.020	0.020	<0.020	0.020	<0.020	0.020	6682218
Benzo(a)pyrene	mg/kg	0.027	0.020	<0.020	0.020	<0.020	0.020	6682218
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Benzo(g,h,i)perylene	mg/kg	<0.050	0.050	<0.050	0.050	<0.050	0.050	6682218
Low Molecular Weight PAH`s	mg/kg	0.11	0.050	0.10	0.050	0.054	0.050	6680482
High Molecular Weight PAH`s	mg/kg	0.27	0.050	0.14	0.050	0.14	0.050	6680482
Total PAH	mg/kg	0.38	0.050	0.24	0.050	0.19	0.050	6680482
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	86		79		90		6682218
D8-ACENAPHTHYLENE (sur.)	%	81		74		85		6682218
D8-NAPHTHALENE (sur.)	%	82		75		86		6682218
TERPHENYL-D14 (sur.)	%	88		80		91		6682218

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ0062		FZ0063		FZ0064		FZ0065		FZ0066		
Sampling Date		2013/03/22		2013/03/22		2013/03/22		2013/03/22		2013/03/22		
	UNITS	**SP13-130-130322**	**RDL**	**SP13-131-130322**	**RDL**	**SP13-132-130322**	**RDL**	**SP13-133-130322**	**RDL**	**SP13-134-130322**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	225	10	100	10	104	10	110	10	99	10	6681791
Soluble Chloride (Cl)	mg/L	75.4	5.0	30.4	5.0	26.3	5.0	69.9	5.0	63.5	5.0	6681788
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	37.3	2.5	18.3	3.0	15.5	2.9	33.9	2.4	33.2	2.6	6680484
Soluble Sodium (Na)	mg/kg	20.9	2.5	11.0	3.0	9.8	2.9	15.5	2.4	16.2	2.6	6680484
Soluble Parameters												
Soluble Conductivity	uS/cm	836	1.0	456	1.0	429	1.0	529	1.0	509	1.0	6680807
Soluble pH	pH Units	7.07	N/A	6.92	N/A	6.74	N/A	7.28	N/A	7.53	N/A	6680805
Wet Soluble Calcium (Ca)	mg/L	115	5.0	68.6	5.0	62.1	5.0	66.6	5.0	62.9	5.0	6681775
Saturation %	%	49.5	1.0	60.2	1.0	58.9	1.0	48.5	1.0	52.2	1.0	6680804
Wet Soluble Magnesium (Mg)	mg/L	22.7	5.0	11.8	5.0	13.6	5.0	13.2	5.0	12.3	5.0	6681775
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6681775
Wet Soluble Sodium (Na)	mg/L	42.2	5.0	18.3	5.0	16.6	5.0	32.0	5.0	31.1	5.0	6681775
Wet Soluble Sulphur (S)	mg/L	73	30	<30	30	<30	30	35	30	31	30	6681775
Sodium Adsorption Ratio	N/A	0.94	0.10	0.54	0.10	0.50	0.10	0.94	0.10	0.94	0.10	6680483

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ0067		FZ0068		FZ0069		FZ0070		
Sampling Date		2013/03/22		2013/03/22		2013/03/22		2013/03/22		
	UNITS	**SP13-210-130322**	**RDL**	**SP13-210-01-130322**	**RDL**	**SP13-211-130322**	**RDL**	**SP13-212-130322**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	85	10	92	10	73	10	97	10	6681791
Soluble Chloride (Cl)	mg/L	172	5.0	197	5.0	132	5.0	253	5.0	6681788
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	99.1	2.9	106	2.7	73.0	2.8	150	3.0	6680484
Soluble Sodium (Na)	mg/kg	58.9	2.9	57.0	2.7	36.2	2.8	81.1	3.0	6680484
Soluble Parameters										
Soluble Conductivity	uS/cm	848	1.0	907	1.0	700	1.0	1100	1.0	6680807
Soluble pH	pH Units	7.81	N/A	7.54	N/A	7.44	N/A	7.64	N/A	6680805
Wet Soluble Calcium (Ca)	mg/L	77.1	5.0	85.3	5.0	75.6	5.0	99.0	5.0	6681775
Saturation %	%	57.5	1.0	54.0	1.0	55.4	1.0	59.3	1.0	6680804
Wet Soluble Magnesium (Mg)	mg/L	10.6	5.0	12.0	5.0	10.1	5.0	11.4	5.0	6681775
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6681775
Wet Soluble Sodium (Na)	mg/L	102	5.0	105	5.0	65.4	5.0	137	5.0	6681775
Wet Soluble Sulphur (S)	mg/L	<30	30	30	30	<30	30	31	30	6681775
Sodium Adsorption Ratio	N/A	2.90	0.10	2.83	0.10	1.88	0.10	3.47	0.10	6680483

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ0071		
Sampling Date		2013/03/22		
	UNITS	**SP13-213-130322**	**RDL**	**QC Batch**
ANIONS				
Soluble Sulphate (SO4)	mg/L	119	10	6681791
Soluble Chloride (Cl)	mg/L	204	5.0	6681788
Calculated Parameters				
Soluble Chloride (Cl)	mg/kg	101	2.5	6680484
Soluble Sodium (Na)	mg/kg	69.3	2.5	6680484
Soluble Parameters				
Soluble Conductivity	uS/cm	990	1.0	6680807
Soluble pH	pH Units	7.57	N/A	6680805
Wet Soluble Calcium (Ca)	mg/L	72.0	5.0	6681775
Saturation %	%	49.4	1.0	6680804
Wet Soluble Magnesium (Mg)	mg/L	12.3	5.0	6681775
Wet Soluble Potassium (K)	mg/L	<20	20	6681775
Wet Soluble Sodium (Na)	mg/L	140	5.0	6681775
Wet Soluble Sulphur (S)	mg/L	37	30	6681775
Sodium Adsorption Ratio	N/A	4.02	0.10	6680483

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

Package 1	3.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6680119	Moisture	2013/03/25					<0.30	%	7.0	20		
6680609	Moisture	2013/03/25					<0.30	%	19.6	20		
6680804	Saturation %	2013/03/24			105	80 - 120	<1.0	%	1.5	30		
6680805	Soluble pH	2013/03/24			102	97 - 103			0.5	20		
6680807	Soluble Conductivity	2013/03/25			99	70 - 130	<1.0	uS/cm	0.2	35		
6680808	Total Antimony (Sb)	2013/03/25	98	75 - 125	108	75 - 125	<0.10	mg/kg	NC	30	90	70 - 130
6680808	Total Arsenic (As)	2013/03/25	105	75 - 125	109	75 - 125	<0.50	mg/kg	1.8	30	95	70 - 130
6680808	Total Barium (Ba)	2013/03/25	NC	75 - 125	104	75 - 125	<0.10	mg/kg	1.8	35	101	70 - 130
6680808	Total Beryllium (Be)	2013/03/25	107	75 - 125	104	75 - 125	<0.40	mg/kg	NC	30		
6680808	Total Cadmium (Cd)	2013/03/25	109	75 - 125	113	75 - 125	<0.050	mg/kg	NC	30	100	70 - 130
6680808	Total Chromium (Cr)	2013/03/25	NC	75 - 125	101	75 - 125	<1.0	mg/kg	3.1	30	96	70 - 130
6680808	Total Cobalt (Co)	2013/03/25	94	75 - 125	100	75 - 125	<0.30	mg/kg	1.0	30	89	70 - 130
6680808	Total Copper (Cu)	2013/03/25	101	75 - 125	104	75 - 125	<0.50	mg/kg	0.8	30	90	70 - 130
6680808	Total Lead (Pb)	2013/03/25	102	75 - 125	104	75 - 125	<0.10	mg/kg	3.3	35	98	70 - 130
6680808	Total Lithium (Li)	2013/03/25	105	75 - 125	102	75 - 125	<5.0	mg/kg	NC	30		
6680808	Total Manganese (Mn)	2013/03/25	NC	75 - 125	101	75 - 125	<0.20	mg/kg	0.7	30	96	70 - 130
6680808	Total Mercury (Hg)	2013/03/25	115	75 - 125	114	75 - 125	<0.050	mg/kg	NC	35	106	70 - 130
6680808	Total Molybdenum (Mo)	2013/03/25	107	75 - 125	104	75 - 125	<0.10	mg/kg	6.9	35	104	70 - 130
6680808	Total Nickel (Ni)	2013/03/25	101	75 - 125	106	75 - 125	<0.80	mg/kg	0.5	30	93	70 - 130
6680808	Total Selenium (Se)	2013/03/25	118	75 - 125	112	75 - 125	<0.50	mg/kg	NC	30		
6680808	Total Silver (Ag)	2013/03/25	100	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35		
6680808	Total Strontium (Sr)	2013/03/25	NC	75 - 125	100	75 - 125	<0.10	mg/kg	2.2	35	104	70 - 130
6680808	Total Thallium (Tl)	2013/03/25	99	75 - 125	99	75 - 125	<0.050	mg/kg	NC	30	88	70 - 130
6680808	Total Tin (Sn)	2013/03/25	98	75 - 125	100	75 - 125	<0.10	mg/kg	NC	35		
6680808	Total Titanium (Ti)	2013/03/25	NC	75 - 125	100	75 - 125	<1.0	mg/kg	1.9	35	70	70 - 130
6680808	Total Uranium (U)	2013/03/25	101	75 - 125	100	75 - 125	<0.050	mg/kg	1.2	30	97	70 - 130
6680808	Total Vanadium (V)	2013/03/25	NC	75 - 125	100	75 - 125	<2.0	mg/kg	0.5	30	96	70 - 130
6680808	Total Zinc (Zn)	2013/03/25	NC	75 - 125	106	75 - 125	<1.0	mg/kg	0.06	30	98	70 - 130
6680808	Total Aluminum (Al)	2013/03/25					<100	mg/kg	0.6	35	94	70 - 130
6680808	Total Calcium (Ca)	2013/03/25					<100	mg/kg	2.3	30	86	70 - 130
6680808	Total Iron (Fe)	2013/03/25					<100	mg/kg	1.1	30	86	70 - 130
6680808	Total Magnesium (Mg)	2013/03/25					<100	mg/kg	0.4	30	87	70 - 130
6680808	Total Phosphorus (P)	2013/03/25					<10	mg/kg	2.8	30	77	70 - 130
6680808	Total Bismuth (Bi)	2013/03/25					<0.10	mg/kg	NC	30		
6680808	Total Potassium (K)	2013/03/25					<100	mg/kg	NC	35		
6680808	Total Sodium (Na)	2013/03/25					<100	mg/kg	NC	35		
6680808	Total Zirconium (Zr)	2013/03/25					<0.50	mg/kg	7.8	30		
6680809	Soluble (2:1) pH	2013/03/25			101	96 - 104			0.3	20		
6680812	Total Antimony (Sb)	2013/03/25	NC	75 - 125	105	75 - 125	<0.10	mg/kg	2.5	30	103	70 - 130

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6680812	Total Arsenic (As)	2013/03/25	NC	75 - 125	108	75 - 125	<0.50	mg/kg	1.4	30	102	70 - 130
6680812	Total Barium (Ba)	2013/03/25	NC	75 - 125	104	75 - 125	<0.10	mg/kg	1.4	35	104	70 - 130
6680812	Total Beryllium (Be)	2013/03/25	109	75 - 125	102	75 - 125	<0.40	mg/kg	NC	30		
6680812	Total Cadmium (Cd)	2013/03/25	106	75 - 125	113	75 - 125	<0.050	mg/kg	3.8	30	105	70 - 130
6680812	Total Chromium (Cr)	2013/03/25	NC	75 - 125	100	75 - 125	<1.0	mg/kg	0.4	30	95	70 - 130
6680812	Total Cobalt (Co)	2013/03/25	96	75 - 125	100	75 - 125	<0.30	mg/kg	0.3	30	92	70 - 130
6680812	Total Copper (Cu)	2013/03/25	NC	75 - 125	107	75 - 125	<0.50	mg/kg	1.2	30	90	70 - 130
6680812	Total Lead (Pb)	2013/03/25	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.6	35	96	70 - 130
6680812	Total Lithium (Li)	2013/03/25	105	75 - 125	102	75 - 125	<5.0	mg/kg				
6680812	Total Manganese (Mn)	2013/03/25	NC	75 - 125	101	75 - 125	<0.20	mg/kg	0.2	30	98	70 - 130
6680812	Total Mercury (Hg)	2013/03/25	117	75 - 125	113	75 - 125	<0.050	mg/kg	NC	35	81	70 - 130
6680812	Total Molybdenum (Mo)	2013/03/25	NC	75 - 125	101	75 - 125	<0.10	mg/kg	0.6	35	95	70 - 130
6680812	Total Nickel (Ni)	2013/03/25	100	75 - 125	103	75 - 125	<0.80	mg/kg	0.4	30	90	70 - 130
6680812	Total Selenium (Se)	2013/03/25	124	75 - 125	122	75 - 125	<0.50	mg/kg	NC	30		
6680812	Total Silver (Ag)	2013/03/25	98	75 - 125	97	75 - 125	<0.050	mg/kg	NC	35		
6680812	Total Strontium (Sr)	2013/03/25	NC	75 - 125	99	75 - 125	<0.10	mg/kg	0.3	35	106	70 - 130
6680812	Total Thallium (Tl)	2013/03/25	92	75 - 125	97	75 - 125	<0.050	mg/kg			84	70 - 130
6680812	Total Tin (Sn)	2013/03/25	NC	75 - 125	100	75 - 125	<0.10	mg/kg	0.3	35		
6680812	Total Titanium (Ti)	2013/03/25	NC	75 - 125	98	75 - 125	<1.0	mg/kg	0.9	35	96	70 - 130
6680812	Total Uranium (U)	2013/03/25	99	75 - 125	100	75 - 125	<0.050	mg/kg			94	70 - 130
6680812	Total Vanadium (V)	2013/03/25	NC	75 - 125	98	75 - 125	<2.0	mg/kg	1.6	30	98	70 - 130
6680812	Total Zinc (Zn)	2013/03/25	NC	75 - 125	124	75 - 125	<1.0	mg/kg	0.3	30	99	70 - 130
6680812	Total Aluminum (Al)	2013/03/25					<100	mg/kg	0.4	35	94	70 - 130
6680812	Total Calcium (Ca)	2013/03/25					<100	mg/kg			87	70 - 130
6680812	Total Iron (Fe)	2013/03/25					<100	mg/kg			86	70 - 130
6680812	Total Magnesium (Mg)	2013/03/25					<100	mg/kg			88	70 - 130
6680812	Total Phosphorus (P)	2013/03/25					<10	mg/kg			94	70 - 130
6680812	Total Bismuth (Bi)	2013/03/25					<0.10	mg/kg				
6680812	Total Potassium (K)	2013/03/25					<100	mg/kg				
6680812	Total Sodium (Na)	2013/03/25					<100	mg/kg				
6680812	Total Zirconium (Zr)	2013/03/25					<0.50	mg/kg				
6680816	Soluble (2:1) pH	2013/03/25			101	96 - 104			1.8	20		
6680930	1,4-Difluorobenzene (sur.)	2013/03/24	97	70 - 130	96	70 - 130	99	%				
6680930	4-BROMOFLUOROBENZENE (sur.)	2013/03/24	105	70 - 130	105	70 - 130	98	%				
6680930	D10-ETHYLBENZENE (sur.)	2013/03/24	111	50 - 130	98	50 - 130	104	%				
6680930	D4-1,2-DICHLOROETHANE (sur.)	2013/03/24	102	70 - 130	101	70 - 130	106	%				
6680930	Benzene	2013/03/24	113	60 - 140	98	60 - 140	<0.0050	mg/kg	NC	40		
6680930	Toluene	2013/03/24	107	60 - 140	93	60 - 140	<0.020	mg/kg	NC	40		
6680930	Ethylbenzene	2013/03/24	119	60 - 140	103	60 - 140	<0.010	mg/kg	NC	40		

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6680930	m & p-Xylene	2013/03/24	120	60 - 140	104	60 - 140	<0.040	mg/kg	NC	40		
6680930	o-Xylene	2013/03/24	122	60 - 140	106	60 - 140	<0.040	mg/kg	NC	40		
6680930	VH C6-C10	2013/03/24			70	60 - 140	<10	mg/kg				
6680930	(C6-C10)	2013/03/24			75	60 - 140	<10	mg/kg	NC	40		
6680930	Methyl-tert-butylether(MTBE)	2013/03/24					<0.10	mg/kg	NC	40		
6680930	Styrene	2013/03/24					<0.030	mg/kg	NC	40		
6680930	Xylenes (Total)	2013/03/24					<0.040	mg/kg	NC	40		
6681775	Wet Soluble Calcium (Ca)	2013/03/25					<5.0	mg/L	NC	30		
6681775	Wet Soluble Magnesium (Mg)	2013/03/25					<5.0	mg/L	NC	30		
6681775	Wet Soluble Potassium (K)	2013/03/25					<20	mg/L	NC	30		
6681775	Wet Soluble Sodium (Na)	2013/03/25					<5.0	mg/L	NC	30		
6681775	Wet Soluble Sulphur (S)	2013/03/25					<30	mg/L	NC	30		
6681788	Soluble Chloride (Cl)	2013/03/25					<5.0	mg/L	NC	30		
6681791	Soluble Sulphate (SO4)	2013/03/25					<10	mg/L	NC	30		
6682218	D10-ANTHRACENE (sur.)	2013/03/26	87	60 - 130	80	60 - 130	81	%				
6682218	D8-ACENAPHTHYLENE (sur.)	2013/03/26	84	50 - 130	80	50 - 130	83	%				
6682218	D8-NAPHTHALENE (sur.)	2013/03/26	84	50 - 130	86	50 - 130	90	%				
6682218	TERPHENYL-D14 (sur.)	2013/03/26	89	60 - 130	79	60 - 130	83	%				
6682218	Naphthalene	2013/03/26	85	50 - 130	89	50 - 130	<0.010	mg/kg	NC	50		
6682218	2-Methylnaphthalene	2013/03/26	85	50 - 130	84	50 - 130	<0.020	mg/kg	NC	50		
6682218	Acenaphthylene	2013/03/26	87	50 - 130	84	50 - 130	<0.0050	mg/kg	NC	50		
6682218	Acenaphthene	2013/03/26	91	50 - 130	89	50 - 130	<0.0050	mg/kg	NC	50		
6682218	Fluorene	2013/03/26	91	50 - 130	83	50 - 130	<0.020	mg/kg	NC	50		
6682218	Phenanthrene	2013/03/26	87	60 - 130	85	60 - 130	<0.020	mg/kg	NC	50		
6682218	Anthracene	2013/03/26	93	60 - 130	84	60 - 130	<0.0040	mg/kg	2.3	50		
6682218	Fluoranthene	2013/03/26	86	60 - 130	86	60 - 130	<0.020	mg/kg	17.9	50		
6682218	Pyrene	2013/03/26	82	60 - 130	87	60 - 130	<0.020	mg/kg	95.6 (1)	50		
6682218	Benzo(a)anthracene	2013/03/26	89	60 - 130	71	60 - 130	<0.020	mg/kg	36.4	50		
6682218	Chrysene	2013/03/26	88	60 - 130	88	60 - 130	<0.020	mg/kg	26.1	50		
6682218	Benzo(b&j)fluoranthene	2013/03/26	92	60 - 130	84	60 - 130	<0.020	mg/kg	11.4	50		
6682218	Benzo(k)fluoranthene	2013/03/26	86	60 - 130	69	60 - 130	<0.020	mg/kg	NC	50		
6682218	Benzo(a)pyrene	2013/03/26	91	60 - 130	77	60 - 130	<0.020	mg/kg	15.6	50		
6682218	Indeno(1,2,3-cd)pyrene	2013/03/26	79	60 - 130	72	60 - 130	<0.050	mg/kg	NC	50		
6682218	Dibenz(a,h)anthracene	2013/03/26	81	60 - 130	75	60 - 130	<0.050	mg/kg	NC	50		
6682218	Benzo(g,h,i)perylene	2013/03/26	79	60 - 130	80	60 - 130	<0.050	mg/kg	NC	50		
6682241	O-TERPHENYL (sur.)	2013/03/25	73	50 - 130	112	50 - 130	115	%				
6682241	F2 (C10-C16 Hydrocarbons)	2013/03/26	75	50 - 130	101	80 - 120	<10	mg/kg	NC	40		
6682241	F3 (C16-C34 Hydrocarbons)	2013/03/26	80	50 - 130	102	80 - 120	<10	mg/kg	12.6	40		
6682241	F4 (C34-C50 Hydrocarbons)	2013/03/26	82	50 - 130	102	80 - 120	<10	mg/kg	NC	40		

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Maxxam Job #: B323114
Report Date: 2013/03/26

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18, VICTORIA, BC
Your P.O. #: 700250162
Sampler Initials: ME

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6682241	Reached Baseline at C50	2013/03/26					0, RDL=N/A	mg/kg	NC	50		
6682244	O-TERPHENYL (sur.)	2013/03/25	94	50 - 130	98	50 - 130	96	%				
6682244	EPH (C10-C19)	2013/03/25	101	50 - 130	100	50 - 130	<100	mg/kg	NC	40		
6682244	EPH (C19-C32)	2013/03/25	89	50 - 130	90	50 - 130	<100	mg/kg	NC	40		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free:(800) 888 8568 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17308 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #: B323114	BOTTLE ORDER #: 354772
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828	CHAIN OF CUSTODY #: C8354772-18-01	PROJECT MANAGER: Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5088	Project Name:			
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC		
				Sampled By:	MF		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS: Please note condition of Security Seal

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): [x]
1 Day [x] 2 Day [ ] 3 Day [ ] Date Required: RUSH
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FZ0062	SP13-30-130322	130322		Soil				X	X			X				2	
2	FZ0063	" 31 "							X	X			X					
3	FZ0064	32					X	X	X	X	X		X					
4	FZ0065	33					X	X	X	X	X		X					
5	FZ0066	34							X	X			X					
6	FZ0067	SP13-210-130322							X	X			X					
7	FZ0068	" -210-01 "							X	X			X					
8	F 0069	-211-							X	X			X					
9	FZ0070	-212-							X	X			X					B323114
10	FZ0071	-213-							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Chris Tonkin	13/03/22	1700h	Nahed Anver	13/03/23	09:20		[ ]	3,3,3	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B323114	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-19-01	Kim Domino
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	ME.		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:
Please note condition OF Security Seal.

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
1 Day [x] 2 Day [ ] 3 Day [ ] Date Required: RUSH [x]
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FZ0381	SP13-214-130322	13-03-22		Soil		X	X	X	X	X						2	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

B323114

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Chris Tonkin	13/03/22	17:00h	Nahid Amer	13/03/23	09:20		[ ]	3,3,3	[x] Yes [ ] No

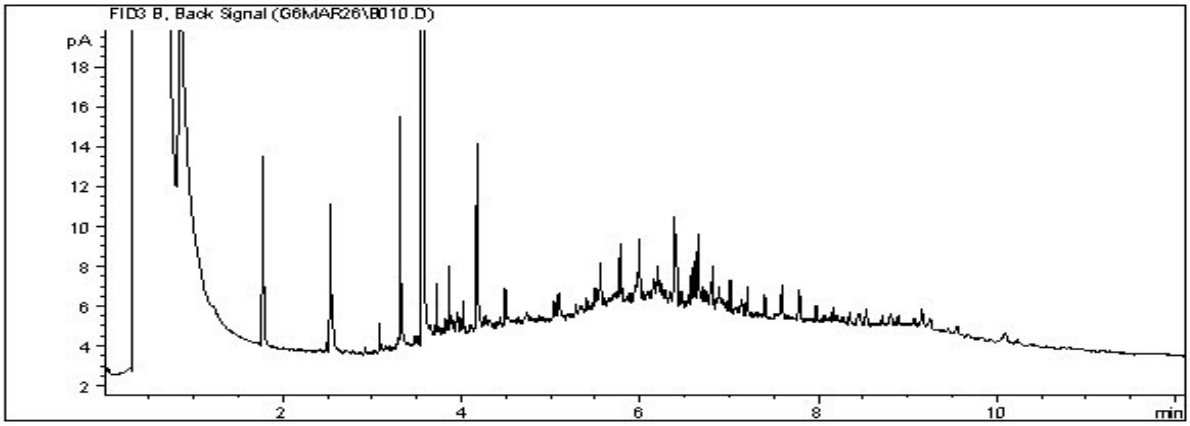
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

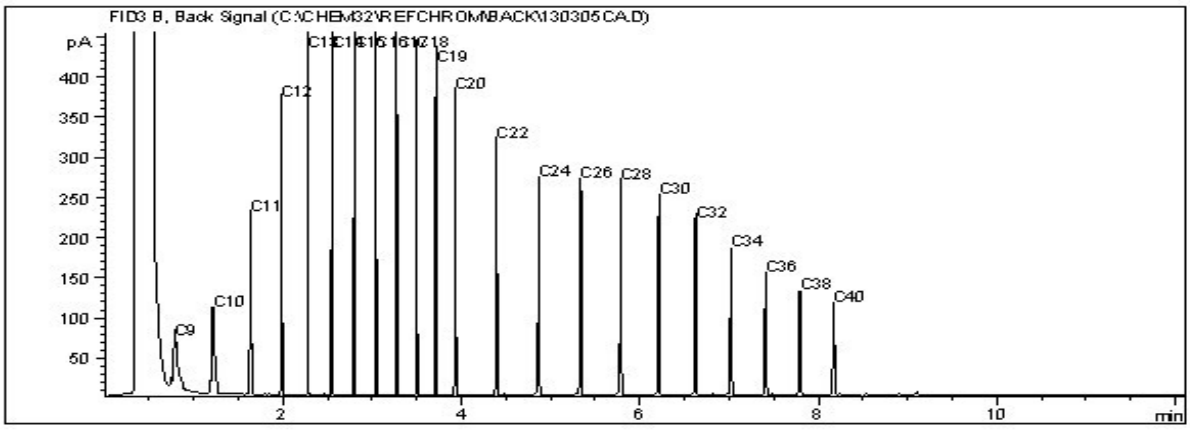
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0064

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-132-130322

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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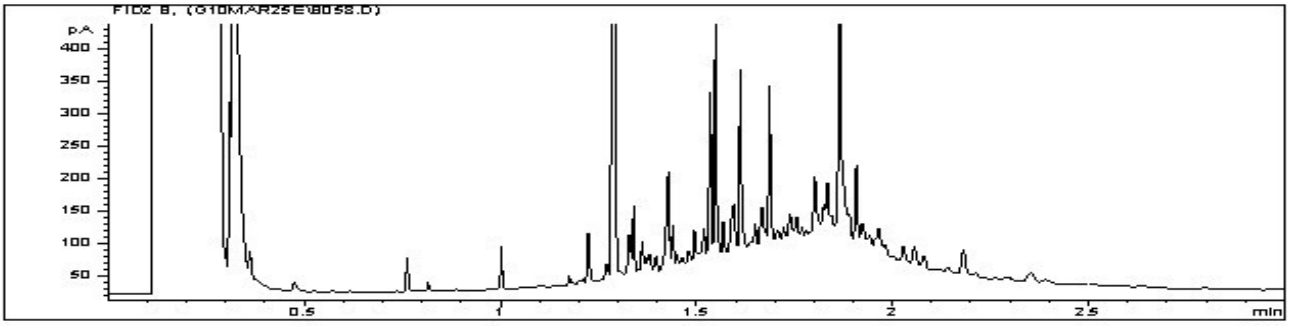
Success Through Science®

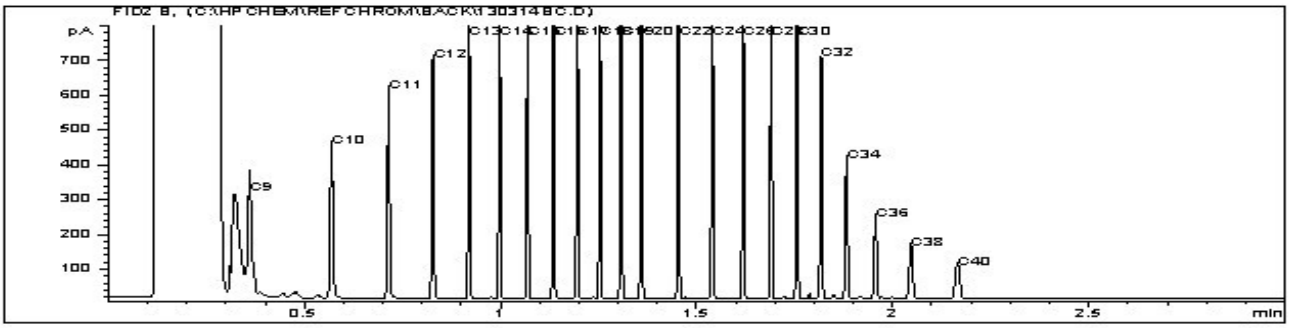
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0064

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-132-130322

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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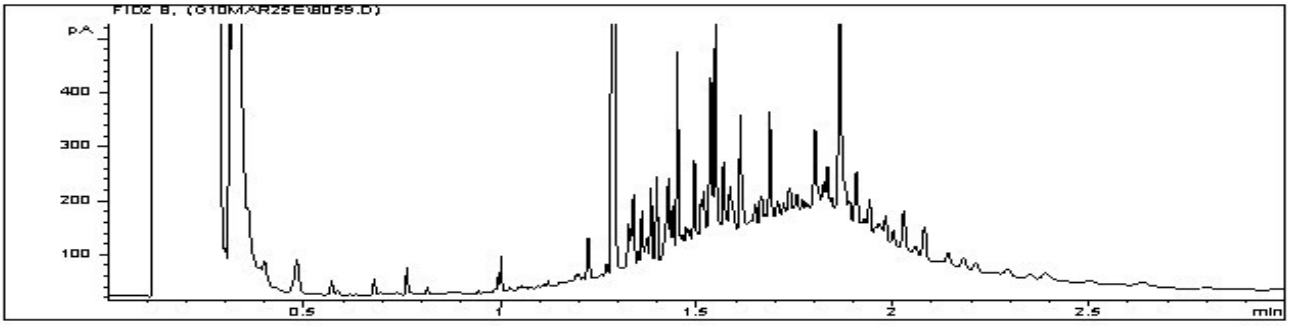
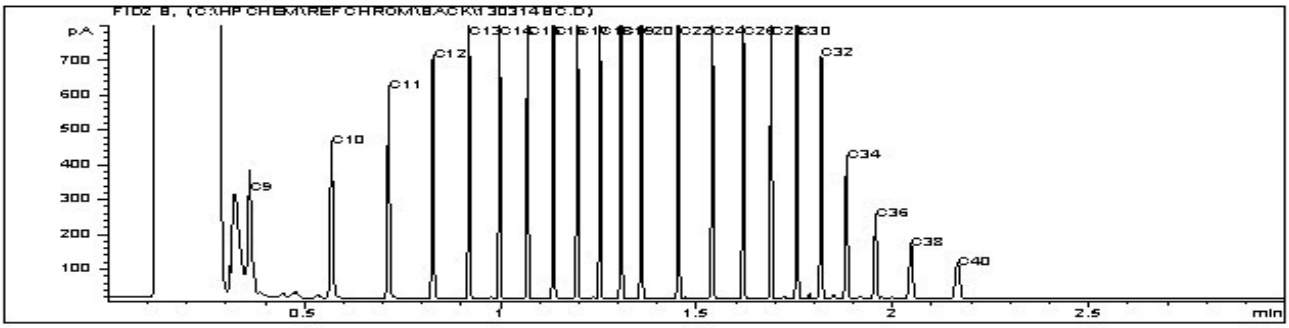
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0064 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-132-130322

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

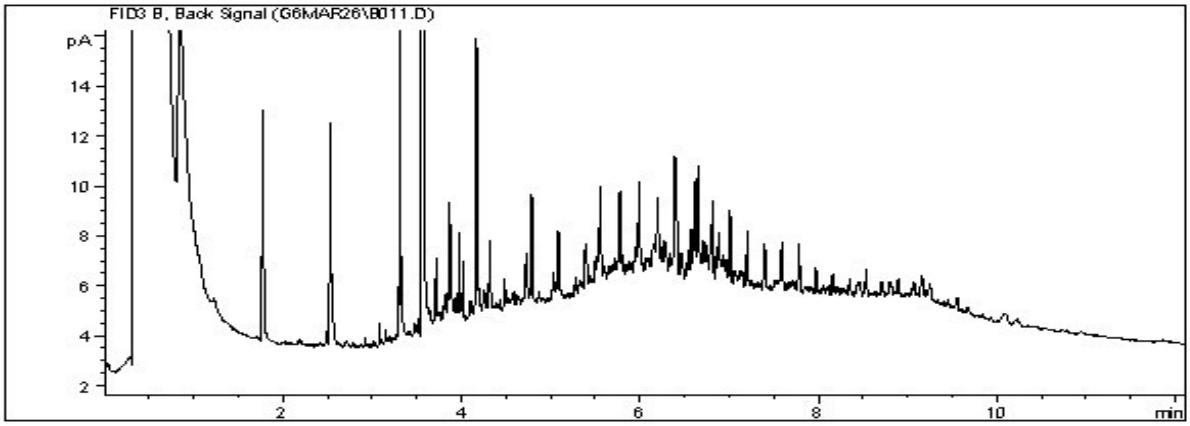
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

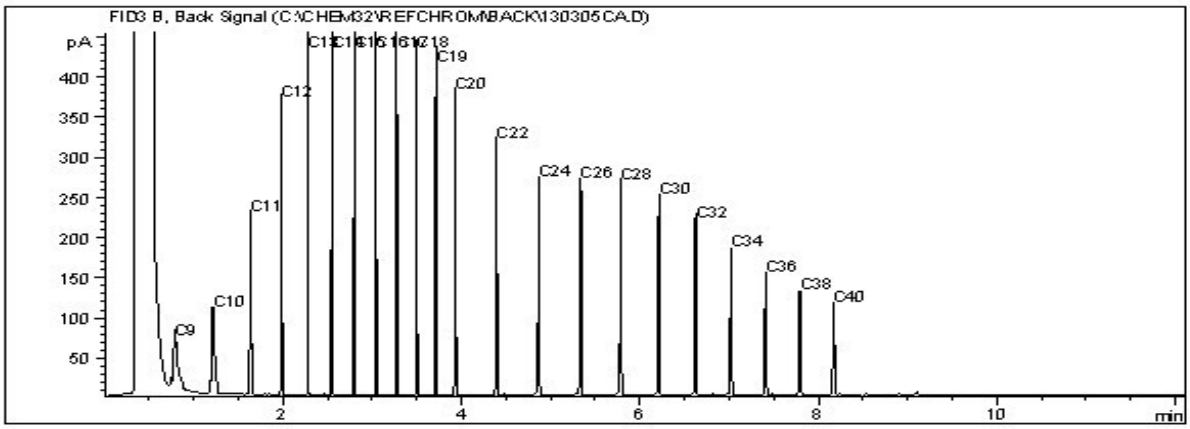
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0064 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-132-130322

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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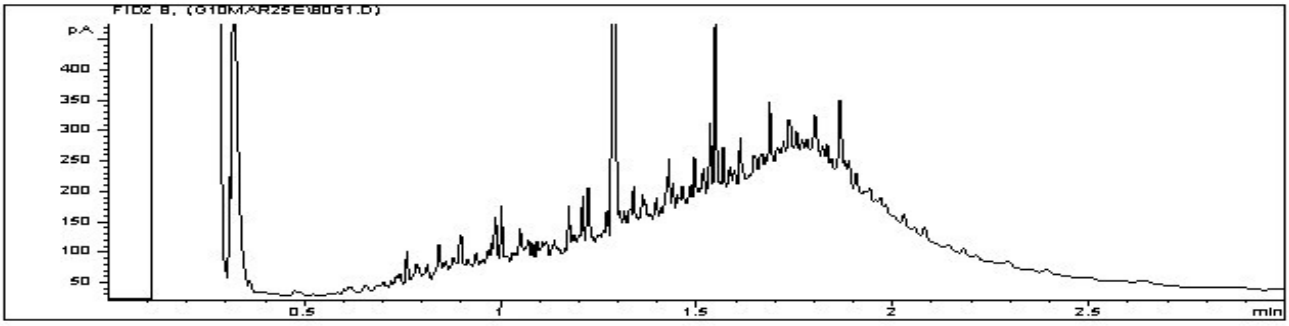
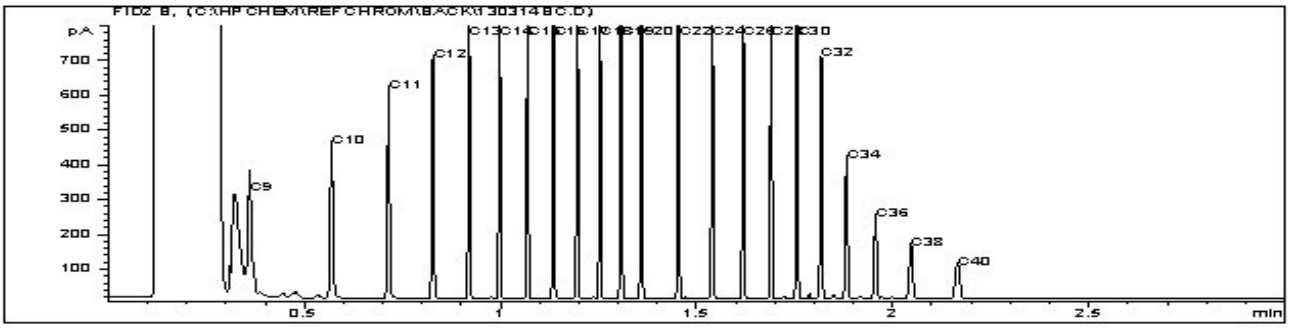
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0065

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-133-130322

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

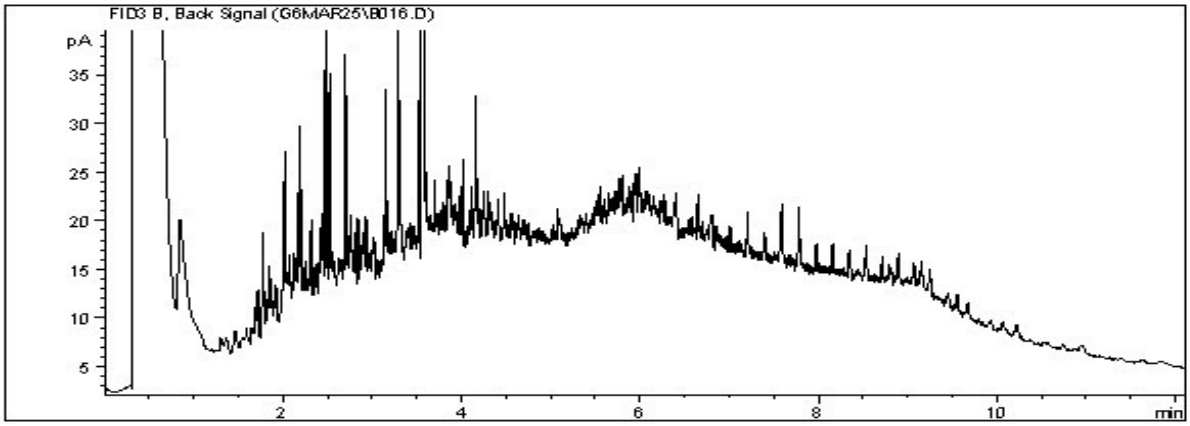
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

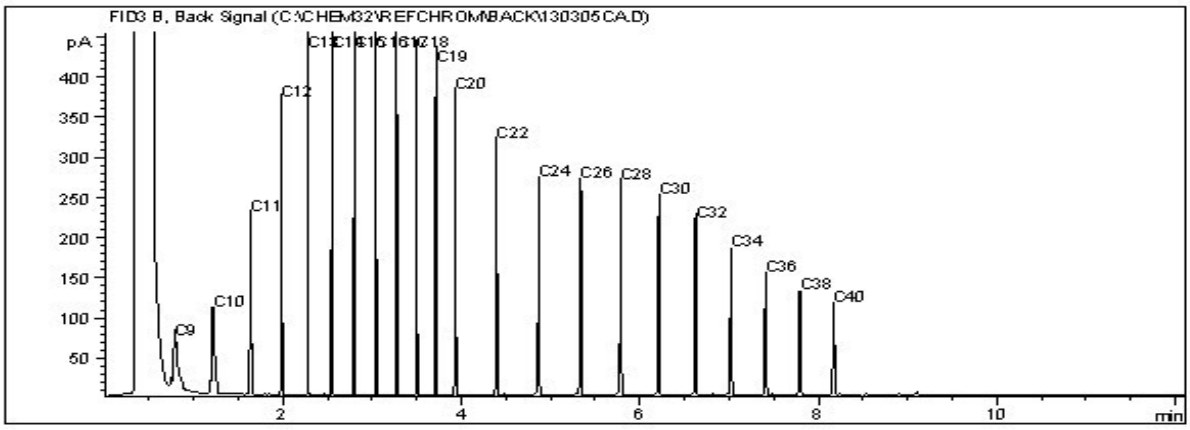
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0065

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-133-130322

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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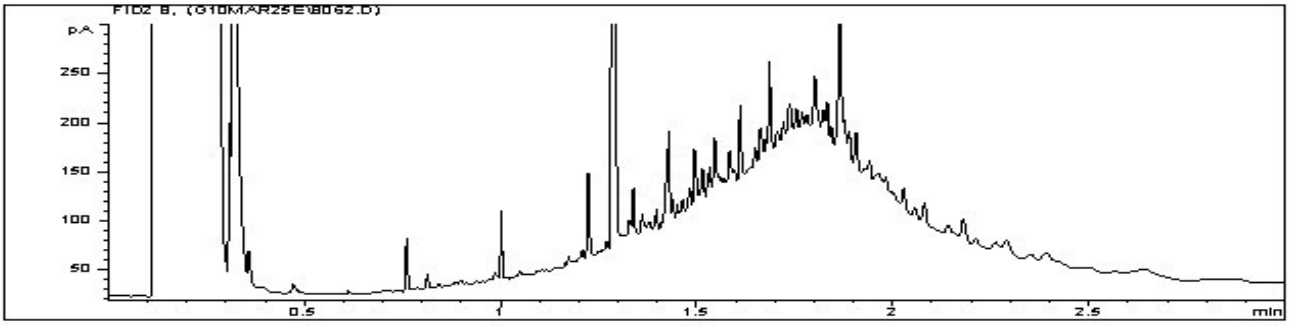
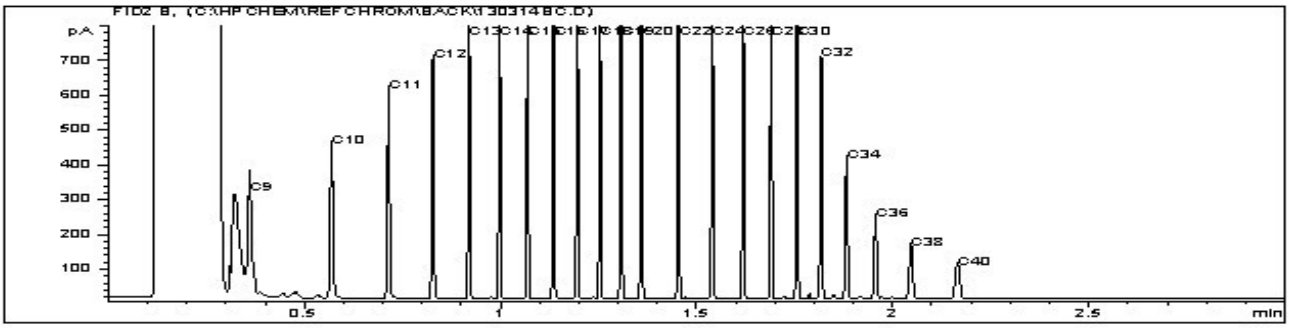
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0381

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-214-130322

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12		Diesel:	C8 - C22	
Varsol:	C8 - C12		Lubricating Oils:	C20 - C40	
Kerosene:	C7 - C16		Crude Oils:	C3 - C60+	

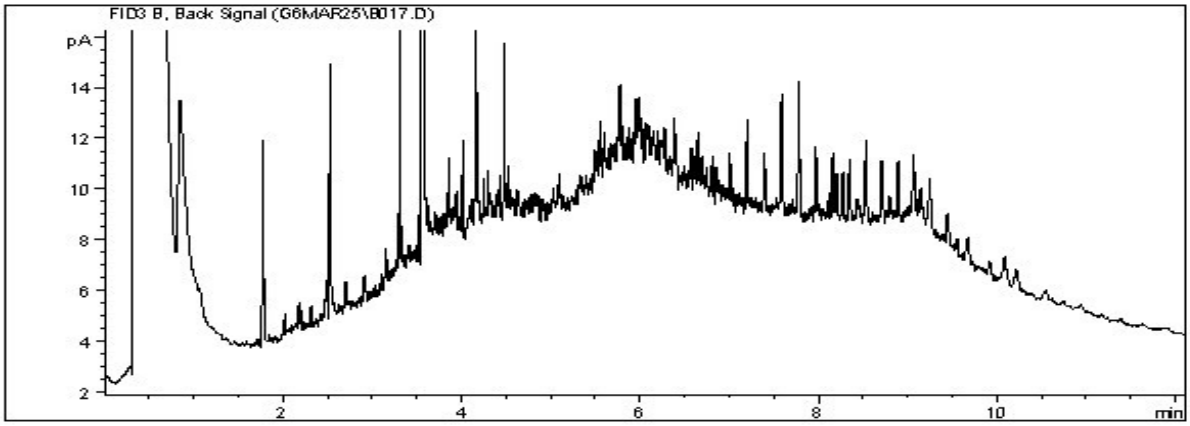
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

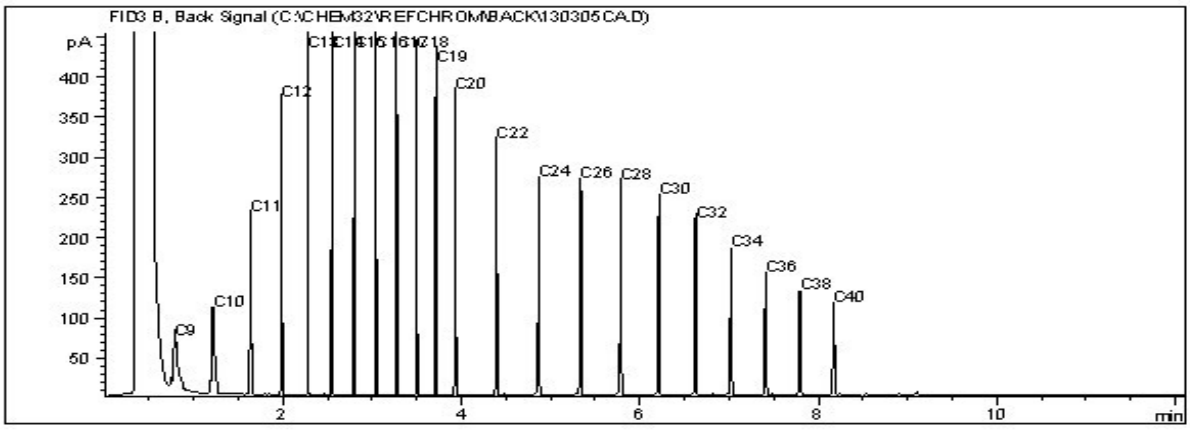
Report Date: 2013/03/26
Maxxam Job #: B323114
Maxxam Sample: FZ0381

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18, VICTORIA, BC
Client ID: SP13-214-130322

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Your P.O. #: 700250162
Your Project #: 511828
Site Location: COLWOOD 18
Your C.O.C. #: 35477220, 35477221, 35477222

Attention: ROB STACEY
SNC LAVALIN ENVIRONMENT INC.
202 - 3440 DOUGLAS STREET
VICTORIA, BC
Canada V8Z 3L5

Report Date: 2013/03/27

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B323383
Received: 2013/03/25, 09:50

Sample Matrix: Soil
Samples Received: 22

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	3	2013/03/25	2013/03/26	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	20	2013/03/26	2013/03/26	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	2	2013/03/27	2013/03/27	BBY6SOP-00011	SM-4500-Cl-
Conductivity (Soluble)	20	2013/03/26	2013/03/26	BBY6SOP-00029	SM-2510 B
Conductivity (Soluble)	2	2013/03/27	2013/03/27	BBY6SOP-00029	SM-2510 B
Volatile F1-BTEX	3	N/A	2013/03/26	BBY WI-00033	BC MOE Lab Method
CCME Hydrocarbons (F2-F4 in soil)	3	2013/03/25	2013/03/26	BBY8SOP-00030	CCME Soil Tier 1
Elements by ICPMS (total)	22	2013/03/26	2013/03/26	BBY7SOP-00001	EPA 6020A
Particulate Mesh 200	1	N/A	2013/03/27	BBY6SOP-00039	Carter SSMA 47.4
Moisture	22	N/A	2013/03/26	BBY8SOP-00017	Ont MOE -E 3139
PAH in Soil by GC/MS (SIM) - CCME	3	2013/03/25	2013/03/25	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	19	2013/03/25	2013/03/26	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	22	N/A	2013/03/26	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	22	N/A	2013/03/26	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	22	2013/03/26	2013/03/26	BBY6SOP-00028	Carter, SSMA 16.2
pH (Soluble)	20	2013/03/26	2013/03/26	BBY6SOP-00025	SM-4500H+B
pH (Soluble)	2	2013/03/27	2013/03/27	BBY6SOP-00025	SM-4500H+B
Sodium Adsorption Ratio SP	22	N/A	2013/03/26		
Saturated Paste	20	2013/03/26	2013/03/26	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	2	2013/03/27	2013/03/27	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Ions Na, Cl	20	N/A	2013/03/26		
Soluble Ions Na, Cl	2	N/A	2013/03/27		
Sulphate (soluble) (soil)	20	2013/03/26	2013/03/26	BBY6SOP-00017	SM 4500-SO42- E
Sulphate (soluble) (soil)	2	2013/03/27	2013/03/27	BBY6SOP-00017	SM 4500-SO42- E
Soluble Cations (Ca,K,Mg,Na,S)	20	N/A	2013/03/26	BBY7SOP-00002	EPA 6020A
Soluble Cations (Ca,K,Mg,Na,S)	2	N/A	2013/03/27	BBY7SOP-00002	EPA 6020A
EPH less PAH in Soil By GC/FID	3	N/A	2013/03/26	BBY WI-00033	BC MOE Lab Method
BC Hydrocarbons in Soil by GC/FID	3	2013/03/25	2013/03/26	BBY8SOP-00029	BC Env Lab Manual

* Results relate only to the items tested.

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kim Domino, Burnaby Senior Project Manager
Email: KDomino@maxxam.ca
Phone# (604) 638-5018

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		FZ3870	FZ3876	FZ3877	FZ3877		
Sampling Date		2013/03/23	2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-224-130323**	**SP13-230-130324**	**SP13-230-01-130324**	**SP13-230-01-130324 Lab-Dup**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	6684515
F3 (C16-C34 Hydrocarbons)	mg/kg	60	27	30	29	10	6684515
F4 (C34-C50 Hydrocarbons)	mg/kg	28	19	16	14	10	6684515
Reached Baseline at C50	mg/kg	YES	YES	YES	YES	N/A	6684515
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	95	97	96	97		6684515

PARTICLE SIZE DISTRIBUTION ANALYSIS (SOIL)

Maxxam ID		FZ3891	FZ3891		
Sampling Date		2013/03/24	2013/03/24		
	UNITS	**SP13-233-130324**	**SP13-233-130324 Lab-Dup**	**RDL**	**QC Batch**
Physical Properties					
200 mesh (>.075 mm)	%	47.1	48.5	0.10	6689174
200 mesh (<.075 mm)	%	52.9	51.5	0.10	6689174

PHYSICAL TESTING (SOIL)

Maxxam ID		FZ3853	FZ3854	FZ3855	FZ3856	FZ3857		FZ3858		
Sampling Date		2013/03/23	2013/03/23	2013/03/23	2013/03/23	2013/03/23		2013/03/23		
	UNITS	**SP13-215-130323**	**SP13-216-130323**	**SP13-217-130323**	**SP13-218-130323**	**SP13-219-130323**	**QC Batch**	**SP13-220-130323**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	21	24	22	18	20	6682451	17	0.30	6683925

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

PHYSICAL TESTING (SOIL)

Maxxam ID		FZ3859	FZ3860	FZ3861		FZ3862	FZ3870		
Sampling Date		2013/03/23	2013/03/23	2013/03/23		2013/03/23	2013/03/23		
	UNITS	**SP13-220-01-130323**	**SP13-221-130323**	**SP13-222-130323**	**QC Batch**	**SP13-223-130323**	**SP13-224-130323**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	19	12	22	6683925	19	18	0.30	6682451

Maxxam ID		FZ3871		FZ3872	FZ3873	FZ3874	FZ3875	FZ3876		
Sampling Date		2013/03/24		2013/03/24	2013/03/24	2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-225-130324**	**QC Batch**	**SP13-226-130324**	**SP13-227-130324**	**SP13-228-130324**	**SP13-229-130324**	**SP13-230-130324**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	17	6683925	18	19	21	20	19	0.30	6682451

Maxxam ID		FZ3877	FZ3878		FZ3879	FZ3891	FZ3892		
Sampling Date		2013/03/24	2013/03/24		2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-230-01-130324**	**SP13-231-130324**	**QC Batch**	**SP13-232-130324**	**SP13-233-130324**	**SP13-234-130324**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	19	23	6682451	16	18	19	0.30	6683925

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		FZ3870	FZ3876	FZ3877		
Sampling Date		2013/03/23	2013/03/24	2013/03/24		
	UNITS	**SP13-224-130323**	**SP13-230-130324**	**SP13-230-01-130324**	**RDL**	**QC Batch**
Calculated Parameters						
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	<100	100	6682247
HEPH (C19-C32 less PAH)	mg/kg	<100	<100	<100	100	6682247
Hydrocarbons						
EPH (C10-C19)	mg/kg	<100	<100	<100	100	6685410
EPH (C19-C32)	mg/kg	<100	<100	<100	100	6685410
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	100	101	99		6685410

RDL = Reportable Detection Limit

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		FZ3870	FZ3876	FZ3877		
Sampling Date		2013/03/23	2013/03/24	2013/03/24		
	UNITS	**SP13-224-130323**	**SP13-230-130324**	**SP13-230-01-130324**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	10	6682715
Volatiles						
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	<0.10	0.10	6684525
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	0.0050	6684525
Toluene	mg/kg	<0.020	<0.020	<0.020	0.020	6684525
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	0.010	6684525
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	6684525
o-Xylene	mg/kg	<0.040	<0.040	<0.040	0.040	6684525
Styrene	mg/kg	<0.030	<0.030	<0.030	0.030	6684525
Xylenes (Total)	mg/kg	<0.040	<0.040	<0.040	0.040	6684525
(C6-C10)	mg/kg	<10	<10	<10	10	6684525
Surrogate Recovery (%)						
1,4-Difluorobenzene (sur.)	%	99	95	96		6684525
4-BROMOFLUOROBENZENE (sur.)	%	96	100	101		6684525
D10-ETHYLBENZENE (sur.)	%	114	113	113		6684525
D4-1,2-DICHLOROETHANE (sur.)	%	115	104	104		6684525

RDL = Reportable Detection Limit

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ3853	FZ3854	FZ3855	FZ3856		FZ3857		
Sampling Date		2013/03/23	2013/03/23	2013/03/23	2013/03/23		2013/03/23		
	UNITS	**SP13-215-130323**	**SP13-216-130323**	**SP13-217-130323**	**SP13-218-130323**	**QC Batch**	**SP13-219-130323**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.90	7.80	7.97	7.96	6684795	7.79	0.010	6684800
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	17000	20000	19900	19400	6684776	21000	100	6684796
Total Antimony (Sb)	mg/kg	2.66	3.15	4.77	18.7	6684776	3.02	0.10	6684796
Total Arsenic (As)	mg/kg	10.6	8.84	13.4	34.2	6684776	11.0	0.50	6684796
Total Barium (Ba)	mg/kg	67.5	81.0	91.5	82.3	6684776	88.4	0.10	6684796
Total Beryllium (Be)	mg/kg	<0.40	<0.40	0.40	0.53	6684776	0.44	0.40	6684796
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	0.13	6684776	<0.10	0.10	6684796
Total Cadmium (Cd)	mg/kg	0.522	0.281	0.253	0.362	6684776	0.341	0.050	6684796
Total Calcium (Ca)	mg/kg	23400	14800	16100	20500	6684776	20600	100	6684796
Total Chromium (Cr)	mg/kg	28.0	35.1	30.2	31.1	6684776	32.7	1.0	6684796
Total Cobalt (Co)	mg/kg	9.53	11.0	11.0	14.8	6684776	11.2	0.30	6684796
Total Copper (Cu)	mg/kg	40.5	39.8	45.4	56.0	6684776	43.1	0.50	6684796
Total Iron (Fe)	mg/kg	23100	25900	25700	27200	6684776	26500	100	6684796
Total Lead (Pb)	mg/kg	13.4	14.9	20.2	32.7	6684776	19.8	0.10	6684796
Total Lithium (Li)	mg/kg	14.1	13.8	14.9	15.2	6684776	14.5	5.0	6684796
Total Magnesium (Mg)	mg/kg	7000	8260	7870	9170	6684776	8880	100	6684796
Total Manganese (Mn)	mg/kg	411	510	497	443	6684776	495	0.20	6684796
Total Mercury (Hg)	mg/kg	0.069	<0.050	0.072	0.055	6684776	0.070	0.050	6684796
Total Molybdenum (Mo)	mg/kg	3.67	2.36	3.07	4.95	6684776	2.79	0.10	6684796
Total Nickel (Ni)	mg/kg	22.2	23.9	24.8	26.0	6684776	25.5	0.80	6684796
Total Phosphorus (P)	mg/kg	344	428	460	403	6684776	491	10	6684796
Total Potassium (K)	mg/kg	544	587	673	526	6684776	654	100	6684796
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	6684776	<0.50	0.50	6684796
Total Silver (Ag)	mg/kg	0.100	0.102	0.095	0.115	6684776	0.093	0.050	6684796
Total Sodium (Na)	mg/kg	310	247	300	322	6684776	306	100	6684796
Total Strontium (Sr)	mg/kg	127	91.7	103	118	6684776	112	0.10	6684796
Total Thallium (Tl)	mg/kg	0.054	0.063	0.065	0.065	6684776	0.064	0.050	6684796
Total Tin (Sn)	mg/kg	0.79	0.88	1.18	3.66	6684776	0.98	0.10	6684796
Total Titanium (Ti)	mg/kg	819	873	919	853	6684776	873	1.0	6684796
Total Uranium (U)	mg/kg	1.57	1.44	1.47	1.68	6684776	1.34	0.050	6684796
Total Vanadium (V)	mg/kg	55.5	65.8	66.8	60.1	6684776	67.2	2.0	6684796
Total Zinc (Zn)	mg/kg	76.5	87.5	98.2	138	6684776	93.6	1.0	6684796
Total Zirconium (Zr)	mg/kg	2.68	2.75	2.61	3.08	6684776	2.86	0.50	6684796

RDL = Reportable Detection Limit

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ3858	FZ3859	FZ3860	FZ3861	FZ3862	FZ3870		
Sampling Date		2013/03/23	2013/03/23	2013/03/23	2013/03/23	2013/03/23	2013/03/23		
	UNITS	**SP13-220-130323**	**SP13-220-01-130323**	**SP13-221-130323**	**SP13-222-130323**	**SP13-223-130323**	**SP13-224-130323**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.92	7.93	8.04	7.79	7.81	7.75	0.010	6684800
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	22800	20500	22300	22000	20900	20200	100	6684796
Total Antimony (Sb)	mg/kg	3.96	2.73	1.53	1.72	2.53	1.69	0.10	6684796
Total Arsenic (As)	mg/kg	14.6	9.73	11.2	7.96	9.37	6.73	0.50	6684796
Total Barium (Ba)	mg/kg	95.4	74.7	103	93.3	93.1	82.3	0.10	6684796
Total Beryllium (Be)	mg/kg	0.43	0.43	<0.40	0.48	0.52	<0.40	0.40	6684796
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6684796
Total Cadmium (Cd)	mg/kg	0.311	0.316	0.352	0.289	0.245	0.204	0.050	6684796
Total Calcium (Ca)	mg/kg	41700	40400	60500	25500	20100	15400	100	6684796
Total Chromium (Cr)	mg/kg	32.3	29.3	28.8	30.9	30.9	31.2	1.0	6684796
Total Cobalt (Co)	mg/kg	12.2	10.5	14.0	11.1	11.1	10.9	0.30	6684796
Total Copper (Cu)	mg/kg	43.4	36.9	46.3	41.5	38.5	38.2	0.50	6684796
Total Iron (Fe)	mg/kg	27400	24900	28400	28400	26200	26100	100	6684796
Total Lead (Pb)	mg/kg	15.0	12.3	11.2	17.0	12.7	10.9	0.10	6684796
Total Lithium (Li)	mg/kg	18.9	16.4	18.5	16.1	16.1	14.0	5.0	6684796
Total Magnesium (Mg)	mg/kg	12700	12000	17800	8850	9480	8740	100	6684796
Total Manganese (Mn)	mg/kg	535	494	510	524	561	526	0.20	6684796
Total Mercury (Hg)	mg/kg	0.067	0.050	0.068	<0.050	<0.050	0.062	0.050	6684796
Total Molybdenum (Mo)	mg/kg	6.00	4.78	10.2	3.53	3.03	1.67	0.10	6684796
Total Nickel (Ni)	mg/kg	25.4	20.9	24.0	26.7	24.6	25.2	0.80	6684796
Total Phosphorus (P)	mg/kg	417	398	458	423	555	562	10	6684796
Total Potassium (K)	mg/kg	555	516	472	558	598	618	100	6684796
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6684796
Total Silver (Ag)	mg/kg	0.093	0.094	0.101	0.117	0.090	0.089	0.050	6684796
Total Sodium (Na)	mg/kg	260	199	181	182	215	208	100	6684796
Total Strontium (Sr)	mg/kg	267	234	462	151	167	94.2	0.10	6684796
Total Thallium (Tl)	mg/kg	0.072	0.053	0.061	0.060	0.066	0.061	0.050	6684796
Total Tin (Sn)	mg/kg	0.91	0.74	0.62	0.78	0.79	0.79	0.10	6684796
Total Titanium (Ti)	mg/kg	989	881	998	851	868	895	1.0	6684796
Total Uranium (U)	mg/kg	2.70	2.26	3.18	2.24	1.58	0.808	0.050	6684796
Total Vanadium (V)	mg/kg	66.7	61.2	66.7	64.5	63.7	65.2	2.0	6684796
Total Zinc (Zn)	mg/kg	88.6	74.7	72.3	82.9	82.9	73.4	1.0	6684796
Total Zirconium (Zr)	mg/kg	3.71	3.17	3.79	3.47	3.25	3.50	0.50	6684796

RDL = Reportable Detection Limit

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ3871	FZ3872		FZ3873		FZ3874	FZ3875		
Sampling Date		2013/03/24	2013/03/24		2013/03/24		2013/03/24	2013/03/24		
	UNITS	**SP13-225-130324**	**SP13-226-130324**	**QC Batch**	**SP13-227-130324**	**QC Batch**	**SP13-228-130324**	**SP13-229-130324**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	7.98	7.81	6684800	7.43	6685560	7.63	7.50	0.010	6684800
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	20300	20900	6684796	17900	6684776	19200	18200	100	6684796
Total Antimony (Sb)	mg/kg	1.18	1.72	6684796	0.75	6684776	0.73	0.75	0.10	6684796
Total Arsenic (As)	mg/kg	7.31	8.41	6684796	5.22	6684776	6.26	5.72	0.50	6684796
Total Barium (Ba)	mg/kg	83.7	91.2	6684796	92.5	6684776	80.4	82.3	0.10	6684796
Total Beryllium (Be)	mg/kg	<0.40	0.52	6684796	0.42	6684776	0.44	<0.40	0.40	6684796
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	6684796	<0.10	6684776	<0.10	<0.10	0.10	6684796
Total Cadmium (Cd)	mg/kg	0.295	0.272	6684796	0.257	6684776	0.249	0.208	0.050	6684796
Total Calcium (Ca)	mg/kg	33400	24900	6684796	7780	6684776	7600	8440	100	6684796
Total Chromium (Cr)	mg/kg	37.9	31.4	6684796	30.1	6684776	33.4	28.2	1.0	6684796
Total Cobalt (Co)	mg/kg	12.4	13.1	6684796	10.2	6684776	11.9	10.2	0.30	6684796
Total Copper (Cu)	mg/kg	43.9	38.7	6684796	38.0	6684776	42.9	37.0	0.50	6684796
Total Iron (Fe)	mg/kg	28000	27200	6684796	24000	6684776	27800	23900	100	6684796
Total Lead (Pb)	mg/kg	9.54	12.3	6684796	16.8	6684776	12.7	14.5	0.10	6684796
Total Lithium (Li)	mg/kg	17.0	16.4	6684796	13.6	6684776	13.9	12.3	5.0	6684796
Total Magnesium (Mg)	mg/kg	11600	9710	6684796	6370	6684776	7050	6200	100	6684796
Total Manganese (Mn)	mg/kg	490	535	6684796	533	6684776	482	476	0.20	6684796
Total Mercury (Hg)	mg/kg	0.057	0.058	6684796	0.059	6684776	0.057	0.054	0.050	6684796
Total Molybdenum (Mo)	mg/kg	4.53	3.62	6684796	1.33	6684776	0.92	0.93	0.10	6684796
Total Nickel (Ni)	mg/kg	26.3	25.9	6684796	23.9	6684776	26.1	23.1	0.80	6684796
Total Phosphorus (P)	mg/kg	479	520	6684796	564	6684776	480	522	10	6684796
Total Potassium (K)	mg/kg	557	650	6684796	778	6684776	702	637	100	6684796
Total Selenium (Se)	mg/kg	<0.50	<0.50	6684796	<0.50	6684776	<0.50	<0.50	0.50	6684796
Total Silver (Ag)	mg/kg	0.105	0.102	6684796	0.113	6684776	0.092	0.077	0.050	6684796
Total Sodium (Na)	mg/kg	252	247	6684796	226	6684776	234	211	100	6684796
Total Strontium (Sr)	mg/kg	242	466	6684796	56.8	6684776	55.9	54.0	0.10	6684796
Total Thallium (Tl)	mg/kg	0.064	0.061	6684796	0.057	6684776	0.051	0.062	0.050	6684796
Total Tin (Sn)	mg/kg	0.89	0.67	6684796	1.04	6684776	0.95	0.65	0.10	6684796
Total Titanium (Ti)	mg/kg	939	873	6684796	794	6684776	804	800	1.0	6684796
Total Uranium (U)	mg/kg	2.05	1.79	6684796	0.896	6684776	0.590	0.713	0.050	6684796
Total Vanadium (V)	mg/kg	66.6	64.4	6684796	61.6	6684776	68.3	59.7	2.0	6684796
Total Zinc (Zn)	mg/kg	76.5	79.9	6684796	85.2	6684776	78.7	90.6	1.0	6684796
Total Zirconium (Zr)	mg/kg	3.99	3.96	6684796	2.38	6684776	3.52	2.95	0.50	6684796

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		FZ3876	FZ3877	FZ3878	FZ3879	FZ3891	FZ3892		
Sampling Date		2013/03/24	2013/03/24	2013/03/24	2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-230-130324**	**SP13-230-01-130324**	**SP13-231-130324**	**SP13-232-130324**	**SP13-233-130324**	**SP13-234-130324**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.39	7.34	7.19	7.69	7.41	7.72	0.010	6684800
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20400	19400	18500	15400	17500	18900	100	6684796
Total Antimony (Sb)	mg/kg	0.76	1.43	3.10	3.54	3.96	0.71	0.10	6684796
Total Arsenic (As)	mg/kg	5.61	11.4	15.3	4.46	10.7	5.73	0.50	6684796
Total Barium (Ba)	mg/kg	85.0	85.8	90.9	51.1	74.4	72.3	0.10	6684796
Total Beryllium (Be)	mg/kg	0.40	0.41	<0.40	<0.40	0.43	<0.40	0.40	6684796
Total Bismuth (Bi)	mg/kg	<0.10	0.12	0.12	<0.10	<0.10	<0.10	0.10	6684796
Total Cadmium (Cd)	mg/kg	0.280	0.246	0.372	0.300	0.248	0.324	0.050	6684796
Total Calcium (Ca)	mg/kg	8150	8070	7200	9480	7230	11400	100	6684796
Total Chromium (Cr)	mg/kg	33.1	32.4	32.1	25.8	31.8	35.7	1.0	6684796
Total Cobalt (Co)	mg/kg	12.5	11.4	10.7	10.9	11.7	12.3	0.30	6684796
Total Copper (Cu)	mg/kg	45.0	45.6	53.1	48.3	49.4	49.3	0.50	6684796
Total Iron (Fe)	mg/kg	27700	27200	25700	24900	26200	29700	100	6684796
Total Lead (Pb)	mg/kg	15.3	18.3	24.6	17.4	22.1	14.9	0.10	6684796
Total Lithium (Li)	mg/kg	14.1	13.4	13.1	10.1	12.5	13.6	5.0	6684796
Total Magnesium (Mg)	mg/kg	7340	7050	6830	7650	7100	7760	100	6684796
Total Manganese (Mn)	mg/kg	552	524	533	469	537	524	0.20	6684796
Total Mercury (Hg)	mg/kg	0.071	0.060	0.069	0.052	0.078	0.080	0.050	6684796
Total Molybdenum (Mo)	mg/kg	0.65	0.81	1.08	0.72	0.83	0.81	0.10	6684796
Total Nickel (Ni)	mg/kg	27.5	26.2	26.7	21.4	25.9	27.7	0.80	6684796
Total Phosphorus (P)	mg/kg	575	562	621	577	593	609	10	6684796
Total Potassium (K)	mg/kg	705	717	803	505	656	652	100	6684796
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	6684796
Total Silver (Ag)	mg/kg	0.097	0.087	0.107	0.105	0.103	0.110	0.050	6684796
Total Sodium (Na)	mg/kg	206	195	229	224	212	208	100	6684796
Total Strontium (Sr)	mg/kg	48.7	52.8	44.4	42.4	42.9	59.5	0.10	6684796
Total Thallium (Tl)	mg/kg	0.060	0.051	0.064	<0.050	<0.050	<0.050	0.050	6684796
Total Tin (Sn)	mg/kg	0.78	1.29	2.26	3.24	2.20	1.57	0.10	6684796
Total Titanium (Ti)	mg/kg	918	876	819	783	813	865	1.0	6684796
Total Uranium (U)	mg/kg	0.518	0.521	0.652	0.378	0.484	0.508	0.050	6684796
Total Vanadium (V)	mg/kg	69.6	67.9	63.3	57.7	64.7	70.1	2.0	6684796
Total Zinc (Zn)	mg/kg	81.2	97.3	138	87.5	117	79.5	1.0	6684796
Total Zirconium (Zr)	mg/kg	3.40	3.39	2.92	2.80	3.18	3.68	0.50	6684796

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ3853		FZ3854	FZ3855	FZ3856	FZ3857		
Sampling Date		2013/03/23		2013/03/23	2013/03/23	2013/03/23	2013/03/23		
	UNITS	**SP13-215-130323**	**RDL**	**SP13-216-130323**	**SP13-217-130323**	**SP13-218-130323**	**SP13-219-130323**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.1	0.10	3.1	3.1	3.1	3.1	0.10	6682716
Benzo[a]pyrene equivalency	N/A	<0.10	0.10	0.41	0.41	0.41	0.41	0.10	6682716
Polycyclic Aromatics									
Naphthalene	mg/kg	0.013	0.010	<0.10(1)	<0.10(1)	<0.10(1)	<0.10(1)	0.10	6684548
2-Methylnaphthalene	mg/kg	0.056	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Acenaphthylene	mg/kg	0.0065	0.0050	<0.050(1)	<0.050(1)	<0.050(1)	<0.050(1)	0.050	6684548
Acenaphthene	mg/kg	0.013	0.0050	<0.050(1)	<0.050(1)	<0.050(1)	<0.050(1)	0.050	6684548
Fluorene	mg/kg	0.033	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Phenanthrene	mg/kg	0.13	0.020	<0.20(1)	<0.20(1)	<0.20(1)	0.21(1)	0.20	6684548
Anthracene	mg/kg	0.040	0.0040	<0.040(1)	<0.040(1)	<0.040(1)	0.075(1)	0.040	6684548
Fluoranthene	mg/kg	0.14	0.020	<0.20(1)	<0.20(1)	<0.20(1)	0.27(1)	0.20	6684548
Pyrene	mg/kg	0.14	0.020	<0.20(1)	<0.20(1)	<0.20(1)	0.31(1)	0.20	6684548
Benzo(a)anthracene	mg/kg	0.061	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Chrysene	mg/kg	0.081	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Benzo(b&j)fluoranthene	mg/kg	0.069	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Benzo(k)fluoranthene	mg/kg	0.025	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Benzo(a)pyrene	mg/kg	0.054	0.020	<0.20(1)	<0.20(1)	<0.20(1)	<0.20(1)	0.20	6684548
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.050	<0.50(1)	<0.50(1)	<0.50(1)	<0.50(1)	0.50	6684548
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.50(1)	<0.50(1)	<0.50(1)	<0.50(1)	0.50	6684548
Benzo(g,h,i)perylene	mg/kg	<0.050	0.050	<0.50(1)	<0.50(1)	<0.50(1)	<0.50(1)	0.50	6684548
Low Molecular Weight PAH`s	mg/kg	0.29	0.050	<0.50	<0.50	<0.50	<0.50	0.50	6682246
High Molecular Weight PAH`s	mg/kg	0.62	0.050	<0.50	<0.50	<0.50	0.58	0.50	6682246
Total PAH	mg/kg	0.91	0.050	<0.50	<0.50	<0.50	0.86	0.50	6682246
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	94		112	104	100	109		6684548
D8-ACENAPHTHYLENE (sur.)	%	85		83	83	83	84		6684548
D8-NAPHTHALENE (sur.)	%	87		87	87	85	87		6684548
TERPHENYL-D14 (sur.)	%	95		93	92	91	92		6684548

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ3858	FZ3859	FZ3860	FZ3861	FZ3862		
Sampling Date		2013/03/23	2013/03/23	2013/03/23	2013/03/23	2013/03/23		
	UNITS	**SP13-220-130323**	**SP13-220-01-130323**	**SP13-221-130323**	**SP13-222-130323**	**SP13-223-130323**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A	0.46	0.57	0.31	0.31	0.31	0.10	6682716
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6682716
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6684548
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6684548
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	6684548
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Phenanthrene	mg/kg	0.025	0.034	<0.020	<0.020	<0.020	0.020	6684548
Anthracene	mg/kg	0.0045	0.014	<0.0040	<0.0040	<0.0040	0.0040	6684548
Fluoranthene	mg/kg	0.048	0.078	0.028	0.031	0.028	0.020	6684548
Pyrene	mg/kg	0.037	0.077	0.023	<0.020	<0.020	0.020	6684548
Benzo(a)anthracene	mg/kg	<0.020	0.022	<0.020	<0.020	<0.020	0.020	6684548
Chrysene	mg/kg	0.026	0.055	<0.020	<0.020	<0.020	0.020	6684548
Benzo(b&j)fluoranthene	mg/kg	0.032	0.035	<0.020	<0.020	<0.020	0.020	6684548
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Benzo(a)pyrene	mg/kg	<0.020	0.028	<0.020	<0.020	<0.020	0.020	6684548
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6682246
High Molecular Weight PAH`s	mg/kg	0.16	0.32	0.051	<0.050	<0.050	0.050	6682246
Total PAH	mg/kg	0.19	0.36	0.051	<0.050	<0.050	0.050	6682246
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	100	107	114	107	109		6684548
D8-ACENAPHTHYLENE (sur.)	%	81	85	93	86	89		6684548
D8-NAPHTHALENE (sur.)	%	84	88	95	89	90		6684548
TERPHENYL-D14 (sur.)	%	95	100	106	101	105		6684548

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ3870		FZ3871	FZ3872	FZ3873	FZ3874		
Sampling Date		2013/03/23		2013/03/24	2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-224-130323**	**QC Batch**	**SP13-225-130324**	**SP13-226-130324**	**SP13-227-130324**	**SP13-228-130324**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.41	6682716	0.31	0.49	0.54	1.3	0.10	6682716
Benzo[a]pyrene equivalency	N/A	<0.10	6682716	<0.10	<0.10	<0.10	0.11	0.10	6682716
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	6684528	<0.010	<0.010	<0.010	<0.010	0.010	6684548
2-Methylnaphthalene	mg/kg	<0.020	6684528	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Acenaphthylene	mg/kg	<0.0050	6684528	<0.0050	<0.0050	0.0060	0.0078	0.0050	6684548
Acenaphthene	mg/kg	<0.0050	6684528	<0.0050	<0.0050	<0.0050	0.0081	0.0050	6684548
Fluorene	mg/kg	<0.020	6684528	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Phenanthrene	mg/kg	<0.020	6684528	<0.020	0.027	0.023	0.087	0.020	6684548
Anthracene	mg/kg	<0.0040	6684528	<0.0040	0.0062	0.0052	0.024(1)	0.0040	6684548
Fluoranthene	mg/kg	0.032	6684528	0.024	0.045	0.052	0.14(1)	0.020	6684548
Pyrene	mg/kg	0.031	6684528	0.022	0.033	0.045	0.14(1)	0.020	6684548
Benzo(a)anthracene	mg/kg	<0.020	6684528	<0.020	<0.020	<0.020	0.063	0.020	6684548
Chrysene	mg/kg	0.021	6684528	<0.020	0.025	0.030	0.076	0.020	6684548
Benzo(b&j)fluoranthene	mg/kg	0.025	6684528	<0.020	0.033	0.038	0.098	0.020	6684548
Benzo(k)fluoranthene	mg/kg	<0.020	6684528	<0.020	<0.020	<0.020	0.026	0.020	6684548
Benzo(a)pyrene	mg/kg	<0.020	6684528	<0.020	0.021	0.026	0.067	0.020	6684548
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	6684528	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Dibenz(a,h)anthracene	mg/kg	<0.050	6684528	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Benzo(g,h,i)perylene	mg/kg	<0.050	6684528	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Low Molecular Weight PAH`s	mg/kg	<0.050	6682246	<0.050	<0.050	<0.050	0.13	0.050	6682246
High Molecular Weight PAH`s	mg/kg	0.11	6682246	<0.050	0.18	0.21	0.68	0.050	6682246
Total PAH	mg/kg	0.11	6682246	<0.050	0.21	0.25	0.80	0.050	6682246
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	88	6684528	102	84	100	97		6684548
D8-ACENAPHTHYLENE (sur.)	%	80	6684528	82	76	83	78		6684548
D8-NAPHTHALENE (sur.)	%	81	6684528	84	79	86	80		6684548
TERPHENYL-D14 (sur.)	%	88	6684528	95	85	96	92		6684548

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate exceeds acceptance criteria due to sample non homogeneity.

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ3874	FZ3875		FZ3876	FZ3877		
Sampling Date		2013/03/24	2013/03/24		2013/03/24	2013/03/24		
	UNITS	**SP13-228-130324 Lab-Dup**	**SP13-229-130324**	**QC Batch**	**SP13-230-130324**	**SP13-230-01-130324**	**RDL**	**QC Batch**
Calculated Parameters								
Index of Additive Cancer Risk(IARC)	N/A		0.88	6682716	0.68	0.69	0.10	6682716
Benzo[a]pyrene equivalency	N/A		<0.10	6682716	<0.10	<0.10	0.10	6682716
Polycyclic Aromatics								
Naphthalene	mg/kg	<0.010	<0.010	6684548	<0.010	<0.010	0.010	6684528
2-Methylnaphthalene	mg/kg	<0.020	<0.020	6684548	<0.020	<0.020	0.020	6684528
Acenaphthylene	mg/kg	<0.0050	0.0098	6684548	0.0061	0.0052	0.0050	6684528
Acenaphthene	mg/kg	<0.0050	<0.0050	6684548	<0.0050	<0.0050	0.0050	6684528
Fluorene	mg/kg	<0.020	<0.020	6684548	<0.020	<0.020	0.020	6684528
Phenanthrene	mg/kg	<0.020	0.034	6684548	0.030	0.033	0.020	6684528
Anthracene	mg/kg	0.0043	0.0099	6684548	0.0069	0.0088	0.0040	6684528
Fluoranthene	mg/kg	0.030	0.074	6684548	0.063	0.067	0.020	6684528
Pyrene	mg/kg	0.033	0.078	6684548	0.069	0.068	0.020	6684528
Benzo(a)anthracene	mg/kg	<0.020	0.031	6684548	0.027	0.027	0.020	6684528
Chrysene	mg/kg	<0.020	0.046	6684548	0.038	0.037	0.020	6684528
Benzo(b&j)fluoranthene	mg/kg	0.025	0.060	6684548	0.048	0.050	0.020	6684528
Benzo(k)fluoranthene	mg/kg	<0.020	0.024	6684548	<0.020	<0.020	0.020	6684528
Benzo(a)pyrene	mg/kg	<0.020	0.044	6684548	0.034	0.034	0.020	6684528
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	6684548	<0.050	<0.050	0.050	6684528
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	6684548	<0.050	<0.050	0.050	6684528
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	6684548	<0.050	<0.050	0.050	6684528
Low Molecular Weight PAH`s	mg/kg		0.054	6682246	<0.050	<0.050	0.050	6682246
High Molecular Weight PAH`s	mg/kg		0.39	6682246	0.31	0.31	0.050	6682246
Total PAH	mg/kg		0.45	6682246	0.35	0.36	0.050	6682246
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	97	91	6684548	87	83		6684528
D8-ACENAPHTHYLENE (sur.)	%	85	84	6684548	82	75		6684528
D8-NAPHTHALENE (sur.)	%	88	87	6684548	84	77		6684528
TERPHENYL-D14 (sur.)	%	94	91	6684548	87	83		6684528

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		FZ3878	FZ3879	FZ3891	FZ3892		
Sampling Date		2013/03/24	2013/03/24	2013/03/24	2013/03/24		
	UNITS	**SP13-231-130324**	**SP13-232-130324**	**SP13-233-130324**	**SP13-234-130324**	**RDL**	**QC Batch**
Calculated Parameters							
Index of Additive Cancer Risk(IARC)	N/A	0.74	0.43	0.70	0.80	0.10	6682716
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	0.10	6682716
Polycyclic Aromatics							
Naphthalene	mg/kg	0.011	<0.010	<0.010	<0.010	0.010	6684548
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Acenaphthylene	mg/kg	0.0068	<0.0050	0.0061	<0.0050	0.0050	6684548
Acenaphthene	mg/kg	0.0056	<0.0050	<0.0050	0.0062	0.0050	6684548
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	6684548
Phenanthrene	mg/kg	0.042	<0.020	0.033	0.076	0.020	6684548
Anthracene	mg/kg	0.012	0.0053	0.0082	0.024	0.0040	6684548
Fluoranthene	mg/kg	0.078	0.044	0.070	0.11	0.020	6684548
Pyrene	mg/kg	0.087	0.043	0.070	0.10	0.020	6684548
Benzo(a)anthracene	mg/kg	0.031	<0.020	0.024	0.039	0.020	6684548
Chrysene	mg/kg	0.045	0.025	0.040	0.051	0.020	6684548
Benzo(b&j)fluoranthene	mg/kg	0.055	0.028	0.043	0.059	0.020	6684548
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	0.021	<0.020	0.020	6684548
Benzo(a)pyrene	mg/kg	0.036	<0.020	0.032	0.039	0.020	6684548
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	6684548
Low Molecular Weight PAH`s	mg/kg	0.077	<0.050	<0.050	0.11	0.050	6682246
High Molecular Weight PAH`s	mg/kg	0.37	0.14	0.32	0.44	0.050	6682246
Total PAH	mg/kg	0.44	0.14	0.37	0.55	0.050	6682246
Surrogate Recovery (%)							
D10-ANTHRACENE (sur.)	%	98	88	101	103		6684548
D8-ACENAPHTHYLENE (sur.)	%	78	78	81	83		6684548
D8-NAPHTHALENE (sur.)	%	81	80	84	86		6684548
TERPHENYL-D14 (sur.)	%	91	87	95	96		6684548

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ3853		FZ3854		FZ3855		FZ3856		FZ3857		
Sampling Date		2013/03/23		2013/03/23		2013/03/23		2013/03/23		2013/03/23		
	UNITS	**SP13-215-130323**	**RDL**	**SP13-216-130323**	**RDL**	**SP13-217-130323**	**RDL**	**SP13-218-130323**	**RDL**	**SP13-219-130323**	**RDL**	**QC Batch**
ANIONS												
Soluble Sulphate (SO4)	mg/L	100	10	63	10	61	10	71	10	50	10	6686445
Soluble Chloride (Cl)	mg/L	201	5.0	117	5.0	123	5.0	202	5.0	152	5.0	6686443
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	107	2.7	60.5	2.6	67.1	2.7	107	2.6	76.6	2.5	6682719
Soluble Sodium (Na)	mg/kg	66.8	2.7	36.5	2.6	41.8	2.7	64.3	2.6	44.1	2.5	6682719
Soluble Parameters												
Soluble Conductivity	uS/cm	983	1.0	680	1.0	700	1.0	985	1.0	835	1.0	6684736
Soluble pH	pH Units	7.39	N/A	7.46	N/A	7.50	N/A	7.50	N/A	7.42	N/A	6684730
Wet Soluble Calcium (Ca)	mg/L	74.6	5.0	62.3	5.0	58.6	5.0	83.5	5.0	77.4	5.0	6685678
Saturation %	%	53.3	1.0	51.7	1.0	54.7	1.0	52.9	1.0	50.4	1.0	6682888
Wet Soluble Magnesium (Mg)	mg/L	14.0	5.0	15.3	5.0	14.1	5.0	17.1	5.0	19.4	5.0	6685678
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	<20	20	6685678
Wet Soluble Sodium (Na)	mg/L	125	5.0	70.5	5.0	76.5	5.0	122	5.0	87.5	5.0	6685678
Wet Soluble Sulphur (S)	mg/L	38	30	<30	30	<30	30	33	30	<30	30	6685678
Sodium Adsorption Ratio	N/A	3.49	0.10	2.08	0.10	2.33	0.10	3.17	0.10	2.31	0.10	6682718

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ3858	FZ3859		FZ3860		FZ3861		FZ3862		
Sampling Date		2013/03/23	2013/03/23		2013/03/23		2013/03/23		2013/03/23		
	UNITS	**SP13-220-130323**	**SP13-220-01-130323**	**RDL**	**SP13-221-130323**	**RDL**	**SP13-222-130323**	**RDL**	**SP13-223-130323**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	40	40	10	89	10	71	10	90	10	6686445
Soluble Chloride (Cl)	mg/L	77.3	64.4	5.0	50.6	5.0	67.0	5.0	66.5	5.0	6686443
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	41.3	34.2	2.7	25.1	2.5	37.0	2.8	36.3	2.7	6682719
Soluble Sodium (Na)	mg/kg	35.1	29.2	2.7	21.6	2.5	28.2	2.8	27.1	2.7	6682719
Soluble Parameters											
Soluble Conductivity	uS/cm	616	533	1.0	520	1.0	581	1.0	590	1.0	6684736
Soluble pH	pH Units	7.55	7.63	N/A	7.64	N/A	7.45	N/A	7.50	N/A	6684730
Wet Soluble Calcium (Ca)	mg/L	66.5	57.5	5.0	59.2	5.0	57.1	5.0	63.0	5.0	6685678
Saturation %	%	53.4	53.2	1.0	49.6	1.0	55.3	1.0	54.5	1.0	6682888
Wet Soluble Magnesium (Mg)	mg/L	17.7	18.0	5.0	22.5	5.0	18.7	5.0	19.2	5.0	6685678
Wet Soluble Potassium (K)	mg/L	<20	<20	20	<20	20	<20	20	<20	20	6685678
Wet Soluble Sodium (Na)	mg/L	65.7	55.0	5.0	43.6	5.0	51.0	5.0	49.6	5.0	6685678
Wet Soluble Sulphur (S)	mg/L	<30	<30	30	34	30	<30	30	31	30	6685678
Sodium Adsorption Ratio	N/A	1.85	1.62	0.10	1.22	0.10	1.50	0.10	1.41	0.10	6682718

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ3870		FZ3871		FZ3872		FZ3873	FZ3873		
Sampling Date		2013/03/23		2013/03/24		2013/03/24		2013/03/24	2013/03/24		
	UNITS	**SP13-224-130323**	**RDL**	**SP13-225-130324**	**RDL**	**SP13-226-130324**	**RDL**	**SP13-227-130324**	**SP13-227-130324 Lab-Dup**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	33	10	173	10	85	10	47	48	10	6686445
Soluble Chloride (Cl)	mg/L	27.3	5.0	61.8	5.0	58.0	5.0	29.0	29.6	5.0	6686443
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	14.3	2.6	27.7	2.2	32.7	2.8	15.4		2.7	6682719
Soluble Sodium (Na)	mg/kg	13.4	2.6	29.6	2.2	30.7	2.8	24.9		2.7	6682719
Soluble Parameters											
Soluble Conductivity	uS/cm	387	1.0	666	1.0	581	1.0	404	409	1.0	6684736
Soluble pH	pH Units	7.37	N/A	7.57	N/A	7.46	N/A	7.20	7.21	N/A	6684730
Wet Soluble Calcium (Ca)	mg/L	43.4	5.0	67.2	5.0	54.5	5.0	33.6	33.6	5.0	6685678
Saturation %	%	52.5	1.0	44.9	1.0	56.4	1.0	53.0	53.1	1.0	6682888
Wet Soluble Magnesium (Mg)	mg/L	17.2	5.0	25.7	5.0	18.6	5.0	14.4	14.1	5.0	6685678
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	<20	20	6685678
Wet Soluble Sodium (Na)	mg/L	25.5	5.0	66.0	5.0	54.5	5.0	46.9	45.7	5.0	6685678
Wet Soluble Sulphur (S)	mg/L	<30	30	55	30	31	30	<30	<30	30	6685678
Sodium Adsorption Ratio	N/A	0.83	0.10	1.74	0.10	1.63	0.10	1.71		0.10	6682718

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ3874		FZ3875		FZ3876		FZ3877		
Sampling Date		2013/03/24		2013/03/24		2013/03/24		2013/03/24		
	UNITS	**SP13-228-130324**	**RDL**	**SP13-229-130324**	**RDL**	**SP13-230-130324**	**RDL**	**SP13-230-01-130324**	**RDL**	**QC Batch**
ANIONS										
Soluble Sulphate (SO4)	mg/L	32	10	20	10	29	10	26	10	6686445
Soluble Chloride (Cl)	mg/L	20.7	5.0	25.6	5.0	16.3	5.0	17.8	5.0	6686443
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	10.2	2.5	13.3	2.6	8.2	2.5	9.2	2.6	6682719
Soluble Sodium (Na)	mg/kg	14.9	2.5	15.9	2.6	11.5	2.5	12.9	2.6	6682719
Soluble Parameters										
Soluble Conductivity	uS/cm	385	1.0	413	1.0	328	1.0	355	1.0	6684736
Soluble pH	pH Units	7.21	N/A	7.10	N/A	7.12	N/A	7.12	N/A	6684730
Wet Soluble Calcium (Ca)	mg/L	34.8	5.0	44.4	5.0	36.1	5.0	40.1	5.0	6685678
Saturation %	%	49.2	1.0	52.0	1.0	50.6	1.0	51.7	1.0	6682888
Wet Soluble Magnesium (Mg)	mg/L	18.3	5.0	17.6	5.0	20.5	5.0	21.0	5.0	6685678
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	<20	20	<20	20	6685678
Wet Soluble Sodium (Na)	mg/L	30.2	5.0	30.6	5.0	22.6	5.0	25.0	5.0	6685678
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	<30	30	<30	30	6685678
Sodium Adsorption Ratio	N/A	1.03	0.10	0.98	0.10	0.75	0.10	0.80	0.10	6682718

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

SALINITY 4 PACKAGE FOR SOIL (SOIL)

Maxxam ID		FZ3878		FZ3879			FZ3891		FZ3892		
Sampling Date		2013/03/24		2013/03/24			2013/03/24		2013/03/24		
	UNITS	**SP13-231-130324**	**RDL**	**SP13-232-130324**	**RDL**	**QC Batch**	**SP13-233-130324**	**RDL**	**SP13-234-130324**	**RDL**	**QC Batch**
ANIONS											
Soluble Sulphate (SO4)	mg/L	16	10	32	10	6686445	35	10	31	10	6689425
Soluble Chloride (Cl)	mg/L	19.3	5.0	12.8	5.0	6686443	22.8	5.0	22.6	5.0	6689422
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	10.2	2.7	5.3	2.1	6682719	11.4	2.5	10.5	2.3	6682719
Soluble Sodium (Na)	mg/kg	15.9	2.7	7.1	2.1	6682719	10.6	2.5	10.3	2.3	6682719
Soluble Parameters											
Soluble Conductivity	uS/cm	334	1.0	300	1.0	6684736	390	1.0	377	1.0	6688965
Soluble pH	pH Units	6.97	N/A	7.40	N/A	6684730	7.36	N/A	7.60	N/A	6688652
Wet Soluble Calcium (Ca)	mg/L	42.4	5.0	34.2	5.0	6685678	53.1	5.0	47.2	5.0	6689162
Saturation %	%	53.1	1.0	41.4	1.0	6682888	49.8	1.0	46.3	1.0	6688608
Wet Soluble Magnesium (Mg)	mg/L	25.2	5.0	14.1	5.0	6685678	18.5	5.0	19.8	5.0	6689162
Wet Soluble Potassium (K)	mg/L	<20	20	<20	20	6685678	<20	20	<20	20	6689162
Wet Soluble Sodium (Na)	mg/L	30.0	5.0	17.1	5.0	6685678	21.2	5.0	22.2	5.0	6689162
Wet Soluble Sulphur (S)	mg/L	<30	30	<30	30	6685678	<30	30	<30	30	6689162
Sodium Adsorption Ratio	N/A	0.90	0.10	0.62	0.10	6682718	0.64	0.10	0.68	0.10	6682718

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

Package 1	1.0°C
Package 2	2.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6682451	Moisture	2013/03/26					<0.30	%	17.1	20		
6682888	Saturation %	2013/03/26			107	80 - 120	<1.0	%	0.2	30		
6683925	Moisture	2013/03/26					<0.30	%	1.9	20		
6684515	O-TERPHENYL (sur.)	2013/03/26	94	50 - 130	94	50 - 130	80	%				
6684515	F2 (C10-C16 Hydrocarbons)	2013/03/26	95	50 - 130	94	80 - 120	<10	mg/kg	NC	40		
6684515	F3 (C16-C34 Hydrocarbons)	2013/03/26	97	50 - 130	95	80 - 120	<10	mg/kg	NC	40		
6684515	F4 (C34-C50 Hydrocarbons)	2013/03/26	97	50 - 130	94	80 - 120	<10	mg/kg	NC	40		
6684515	Reached Baseline at C50	2013/03/26							NC	50		
6684525	1,4-Difluorobenzene (sur.)	2013/03/25	101	70 - 130	98	70 - 130	98	%				
6684525	4-BROMOFLUOROBENZENE (sur.)	2013/03/25	91	70 - 130	98	70 - 130	101	%				
6684525	D10-ETHYLBENZENE (sur.)	2013/03/25	113	50 - 130	104	50 - 130	109	%				
6684525	D4-1,2-DICHLOROETHANE (sur.)	2013/03/25	108	70 - 130	104	70 - 130	102	%				
6684525	Benzene	2013/03/25	125	60 - 140	115	60 - 140	<0.0050	mg/kg	NC(1)	40		
6684525	Toluene	2013/03/25	129	60 - 140	120	60 - 140	<0.020	mg/kg	NC(1)	40		
6684525	Ethylbenzene	2013/03/25	122	60 - 140	115	60 - 140	<0.010	mg/kg	NC(1)	40		
6684525	m & p-Xylene	2013/03/25	118	60 - 140	112	60 - 140	<0.040	mg/kg	NC(1)	40		
6684525	o-Xylene	2013/03/25	117	60 - 140	114	60 - 140	<0.040	mg/kg	NC(1)	40		
6684525	(C6-C10)	2013/03/25			101	60 - 140	<10	mg/kg				
6684525	Methyl-tert-butylether(MTBE)	2013/03/25					<0.10	mg/kg	NC(1)	40		
6684525	Styrene	2013/03/25					<0.030	mg/kg				
6684525	Xylenes (Total)	2013/03/25					<0.040	mg/kg	NC	40		
6684528	D10-ANTHRACENE (sur.)	2013/03/26	84	60 - 130	72	60 - 130	74	%				
6684528	D8-ACENAPHTHYLENE (sur.)	2013/03/26	83	50 - 130	75	50 - 130	77	%				
6684528	D8-NAPHTHALENE (sur.)	2013/03/26	84	50 - 130	79	50 - 130	83	%				
6684528	TERPHENYL-D14 (sur.)	2013/03/26	86	60 - 130	72	60 - 130	75	%				
6684528	Naphthalene	2013/03/25	78	50 - 130	81	50 - 130	<0.010	mg/kg	NC	50		
6684528	2-Methylnaphthalene	2013/03/25	74	50 - 130	76	50 - 130	<0.020	mg/kg	NC	50		
6684528	Acenaphthylene	2013/03/25	77	50 - 130	76	50 - 130	<0.0050	mg/kg	NC	50		
6684528	Acenaphthene	2013/03/25	79	50 - 130	81	50 - 130	<0.0050	mg/kg	NC	50		
6684528	Fluorene	2013/03/25	79	50 - 130	77	50 - 130	<0.020	mg/kg	NC	50		
6684528	Phenanthrene	2013/03/25	72	60 - 130	76	60 - 130	<0.020	mg/kg	NC	50		
6684528	Anthracene	2013/03/25	85	60 - 130	75	60 - 130	<0.0040	mg/kg	NC	50		
6684528	Fluoranthene	2013/03/25	80	60 - 130	75	60 - 130	<0.020	mg/kg	NC	50		
6684528	Pyrene	2013/03/25	82	60 - 130	77	60 - 130	<0.020	mg/kg	NC	50		
6684528	Benzo(a)anthracene	2013/03/25	69	60 - 130	64	60 - 130	<0.020	mg/kg	NC	50		
6684528	Chrysene	2013/03/25	72	60 - 130	77	60 - 130	<0.020	mg/kg	NC	50		
6684528	Benzo(b&j)fluoranthene	2013/03/25	75	60 - 130	67	60 - 130	<0.020	mg/kg	NC	50		
6684528	Benzo(k)fluoranthene	2013/03/25	64	60 - 130	69	60 - 130	<0.020	mg/kg	NC	50		
6684528	Benzo(a)pyrene	2013/03/25	78	60 - 130	70	60 - 130	<0.020	mg/kg	NC	50		

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6684528	Indeno(1,2,3-cd)pyrene	2013/03/25	74	60 - 130	67	60 - 130	<0.050	mg/kg	NC	50		
6684528	Dibenz(a,h)anthracene	2013/03/25	75	60 - 130	69	60 - 130	<0.050	mg/kg	NC	50		
6684528	Benzo(g,h,i)perylene	2013/03/25	69	60 - 130	71	60 - 130	<0.050	mg/kg	NC	50		
6684548	D10-ANTHRACENE (sur.)	2013/03/26	96	60 - 130	106	60 - 130	109	%				
6684548	D8-ACENAPHTHYLENE (sur.)	2013/03/26	83	50 - 130	91	50 - 130	92	%				
6684548	D8-NAPHTHALENE (sur.)	2013/03/26	85	50 - 130	95	50 - 130	94	%				
6684548	TERPHENYL-D14 (sur.)	2013/03/26	92	60 - 130	102	60 - 130	102	%				
6684548	Naphthalene	2013/03/26	83	50 - 130	106	50 - 130	<0.010	mg/kg	NC	50		
6684548	2-Methylnaphthalene	2013/03/26	80	50 - 130	100	50 - 130	<0.020	mg/kg	NC	50		
6684548	Acenaphthylene	2013/03/26	82	50 - 130	103	50 - 130	<0.0050	mg/kg	NC	50		
6684548	Acenaphthene	2013/03/26	85	50 - 130	105	50 - 130	<0.0050	mg/kg	NC	50		
6684548	Fluorene	2013/03/26	83	50 - 130	104	50 - 130	<0.020	mg/kg	NC	50		
6684548	Phenanthrene	2013/03/26	81	60 - 130	106	60 - 130	<0.020	mg/kg	NC	50		
6684548	Anthracene	2013/03/26	95	60 - 130	121	60 - 130	<0.0040	mg/kg	NC	50		
6684548	Fluoranthene	2013/03/26	88	60 - 130	116	60 - 130	<0.020	mg/kg	NC	50		
6684548	Pyrene	2013/03/26	90	60 - 130	118	60 - 130	<0.020	mg/kg	NC	50		
6684548	Benzo(a)anthracene	2013/03/26	76	60 - 130	100	60 - 130	<0.020	mg/kg	NC	50		
6684548	Chrysene	2013/03/26	79	60 - 130	103	60 - 130	<0.020	mg/kg	NC	50		
6684548	Benzo(b&j)fluoranthene	2013/03/26	67	60 - 130	106	60 - 130	<0.020	mg/kg	NC	50		
6684548	Benzo(k)fluoranthene	2013/03/26	101	60 - 130	108	60 - 130	<0.020	mg/kg	NC	50		
6684548	Benzo(a)pyrene	2013/03/26	85	60 - 130	109	60 - 130	<0.020	mg/kg	NC	50		
6684548	Indeno(1,2,3-cd)pyrene	2013/03/26	80	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6684548	Dibenz(a,h)anthracene	2013/03/26	81	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
6684548	Benzo(g,h,i)perylene	2013/03/26	71	60 - 130	91	60 - 130	<0.050	mg/kg	NC	50		
6684730	Soluble pH	2013/03/26			101	97 - 103			0.1	20		
6684736	Soluble Conductivity	2013/03/26			105	70 - 130	<1.0	uS/cm	1.2	35		
6684776	Total Antimony (Sb)	2013/03/26	94	75 - 125	101	75 - 125	<0.10	mg/kg	8.8	30	96	70 - 130
6684776	Total Arsenic (As)	2013/03/26	106	75 - 125	102	75 - 125	<0.50	mg/kg	2.4	30	104	70 - 130
6684776	Total Barium (Ba)	2013/03/26	NC	75 - 125	98	75 - 125	<0.10	mg/kg	3.1	35	101	70 - 130
6684776	Total Beryllium (Be)	2013/03/26	115	75 - 125	102	75 - 125	<0.40	mg/kg	NC	30		
6684776	Total Cadmium (Cd)	2013/03/26	103	75 - 125	104	75 - 125	<0.050	mg/kg	1.0	30	110	70 - 130
6684776	Total Chromium (Cr)	2013/03/26	97	75 - 125	97	75 - 125	<1.0	mg/kg	7.7	30	98	70 - 130
6684776	Total Cobalt (Co)	2013/03/26	96	75 - 125	98	75 - 125	<0.30	mg/kg	4.7	30	93	70 - 130
6684776	Total Copper (Cu)	2013/03/26	93	75 - 125	98	75 - 125	<0.50	mg/kg	1.7	30	89	70 - 130
6684776	Total Lead (Pb)	2013/03/26	98	75 - 125	100	75 - 125	0.16, RDL=0.10	mg/kg	1.3	35	100	70 - 130
6684776	Total Lithium (Li)	2013/03/26	110	75 - 125	99	75 - 125	<5.0	mg/kg	NC	30		
6684776	Total Manganese (Mn)	2013/03/26	NC	75 - 125	101	75 - 125	<0.20	mg/kg	8.1	30	97	70 - 130
6684776	Total Mercury (Hg)	2013/03/26	109	75 - 125	106	75 - 125	<0.050	mg/kg	NC	35	79	70 - 130
6684776	Total Molybdenum (Mo)	2013/03/26	102	75 - 125	96	75 - 125	<0.10	mg/kg	1.6	35	105	70 - 130

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6684776	Total Nickel (Ni)	2013/03/26	NC	75 - 125	95	75 - 125	<0.80	mg/kg	4.6	30	93	70 - 130
6684776	Total Selenium (Se)	2013/03/26	117	75 - 125	111	75 - 125	<0.50	mg/kg	NC	30		
6684776	Total Silver (Ag)	2013/03/26	97	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35		
6684776	Total Strontium (Sr)	2013/03/26	NC	75 - 125	93	75 - 125	<0.10	mg/kg	3.0	35	99	70 - 130
6684776	Total Thallium (Tl)	2013/03/26	91	75 - 125	93	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
6684776	Total Tin (Sn)	2013/03/26	94	75 - 125	93	75 - 125	<0.10	mg/kg	NC	35		
6684776	Total Titanium (Ti)	2013/03/26	NC	75 - 125	96	75 - 125	<1.0	mg/kg	20.7	35	100	70 - 130
6684776	Total Uranium (U)	2013/03/26	101	75 - 125	95	75 - 125	<0.050	mg/kg	6.8	30	98	70 - 130
6684776	Total Vanadium (V)	2013/03/26	97	75 - 125	98	75 - 125	<2.0	mg/kg	3.5	30	99	70 - 130
6684776	Total Zinc (Zn)	2013/03/26	NC	75 - 125	101	75 - 125	<1.0	mg/kg	0.3	30	100	70 - 130
6684776	Total Aluminum (Al)	2013/03/26					<100	mg/kg	3.9	35	95	70 - 130
6684776	Total Calcium (Ca)	2013/03/26					<100	mg/kg	1.9	30	104	70 - 130
6684776	Total Iron (Fe)	2013/03/26					<100	mg/kg	1.5	30	97	70 - 130
6684776	Total Magnesium (Mg)	2013/03/26					<100	mg/kg	8.6	30	93	70 - 130
6684776	Total Phosphorus (P)	2013/03/26					<10	mg/kg	3.3	30	95	70 - 130
6684776	Total Bismuth (Bi)	2013/03/26					<0.10	mg/kg	NC	30		
6684776	Total Potassium (K)	2013/03/26					<100	mg/kg	1.6	35		
6684776	Total Sodium (Na)	2013/03/26					<100	mg/kg	NC	35		
6684776	Total Zirconium (Zr)	2013/03/26					<0.50	mg/kg	2.7	30		
6684795	Soluble (2:1) pH	2013/03/26			102	96 - 104			0.1	20		
6684796	Total Antimony (Sb)	2013/03/26	NC	75 - 125	103	75 - 125	<0.10	mg/kg	8.9	30	94	70 - 130
6684796	Total Arsenic (As)	2013/03/26	94	75 - 125	105	75 - 125	<0.50	mg/kg	13.2	30	99	70 - 130
6684796	Total Barium (Ba)	2013/03/26	NC	75 - 125	101	75 - 125	<0.10	mg/kg	0.9	35	99	70 - 130
6684796	Total Beryllium (Be)	2013/03/26	113	75 - 125	106	75 - 125	<0.40	mg/kg	NC	30		
6684796	Total Cadmium (Cd)	2013/03/26	98	75 - 125	110	75 - 125	<0.050	mg/kg	8.8	30	99	70 - 130
6684796	Total Chromium (Cr)	2013/03/26	NC	75 - 125	99	75 - 125	<1.0	mg/kg	2.6	30	96	70 - 130
6684796	Total Cobalt (Co)	2013/03/26	91	75 - 125	99	75 - 125	<0.30	mg/kg	8.8	30	92	70 - 130
6684796	Total Copper (Cu)	2013/03/26	NC	75 - 125	101	75 - 125	<0.50	mg/kg	0.8	30	89	70 - 130
6684796	Total Lead (Pb)	2013/03/26	NC	75 - 125	102	75 - 125	<0.10	mg/kg	12.0	35	96	70 - 130
6684796	Total Lithium (Li)	2013/03/26	98	75 - 125	106	75 - 125	<5.0	mg/kg	NC	30		
6684796	Total Manganese (Mn)	2013/03/26	NC	75 - 125	100	75 - 125	<0.20	mg/kg	3.7	30	95	70 - 130
6684796	Total Mercury (Hg)	2013/03/26	103	75 - 125	107	75 - 125	<0.050	mg/kg	2.8	35	90	70 - 130
6684796	Total Molybdenum (Mo)	2013/03/26	NC	75 - 125	101	75 - 125	<0.10	mg/kg	10.6	35	96	70 - 130
6684796	Total Nickel (Ni)	2013/03/26	NC	75 - 125	98	75 - 125	<0.80	mg/kg	7.9	30	91	70 - 130
6684796	Total Selenium (Se)	2013/03/26	110	75 - 125	111	75 - 125	<0.50	mg/kg	4.4	30		
6684796	Total Silver (Ag)	2013/03/26	92	75 - 125	98	75 - 125	<0.050	mg/kg	0.02	35		
6684796	Total Strontium (Sr)	2013/03/26	NC	75 - 125	97	75 - 125	<0.10	mg/kg	6.5	35	99	70 - 130
6684796	Total Thallium (Tl)	2013/03/26	89	75 - 125	95	75 - 125	<0.050	mg/kg	NC	30	83	70 - 130
6684796	Total Tin (Sn)	2013/03/26	NC	75 - 125	97	75 - 125	<0.10	mg/kg	13.2	35		

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6684796	Total Titanium (Ti)	2013/03/26	NC	75 - 125	99	75 - 125	<1.0	mg/kg	4.6	35	95	70 - 130
6684796	Total Uranium (U)	2013/03/26	99	75 - 125	99	75 - 125	<0.050	mg/kg	8.9	30	92	70 - 130
6684796	Total Vanadium (V)	2013/03/26	NC	75 - 125	98	75 - 125	<2.0	mg/kg	7.4	30	94	70 - 130
6684796	Total Zinc (Zn)	2013/03/26	NC	75 - 125	104	75 - 125	<1.0	mg/kg	17.8	30	97	70 - 130
6684796	Total Aluminum (Al)	2013/03/26					<100	mg/kg	5.1	35	93	70 - 130
6684796	Total Calcium (Ca)	2013/03/26					<100	mg/kg	7.8	30	99	70 - 130
6684796	Total Iron (Fe)	2013/03/26					<100	mg/kg	10.2	30	93	70 - 130
6684796	Total Magnesium (Mg)	2013/03/26					<100	mg/kg	4.6	30	89	70 - 130
6684796	Total Phosphorus (P)	2013/03/26					<10	mg/kg	4.4	30	90	70 - 130
6684796	Total Bismuth (Bi)	2013/03/26					<0.10	mg/kg	NC	30		
6684796	Total Potassium (K)	2013/03/26					<100	mg/kg	7.4	35		
6684796	Total Sodium (Na)	2013/03/26					<100	mg/kg	6.1	35		
6684796	Total Zirconium (Zr)	2013/03/26					<0.50	mg/kg	7.3	30		
6684800	Soluble (2:1) pH	2013/03/26			102	96 - 104			1.4	20		
6685410	O-TERPHENYL (sur.)	2013/03/26	99	50 - 130	100	50 - 130	98	%				
6685410	EPH (C10-C19)	2013/03/26	105	50 - 130	104	50 - 130	<100	mg/kg	NC	40		
6685410	EPH (C19-C32)	2013/03/26	94	50 - 130	93	50 - 130	<100	mg/kg	NC	40		
6685560	Soluble (2:1) pH	2013/03/26			102	96 - 104			0.2	20		
6685678	Wet Soluble Calcium (Ca)	2013/03/26					<5.0	mg/L	0.06	30		
6685678	Wet Soluble Magnesium (Mg)	2013/03/26					<5.0	mg/L	NC	30		
6685678	Wet Soluble Potassium (K)	2013/03/26					<20	mg/L	NC	30		
6685678	Wet Soluble Sodium (Na)	2013/03/26					<5.0	mg/L	2.5	30		
6685678	Wet Soluble Sulphur (S)	2013/03/26					<30	mg/L	NC	30		
6686443	Soluble Chloride (Cl)	2013/03/26					<5.0	mg/L	2.3	30		
6686445	Soluble Sulphate (SO4)	2013/03/26					<10	mg/L	NC	30		
6688608	Saturation %	2013/03/27			111	80 - 120	<1.0	%	1.5	30		
6688652	Soluble pH	2013/03/27			100	97 - 103			0.1	20		
6688965	Soluble Conductivity	2013/03/27			98	70 - 130	<1.0	uS/cm	0.8	35		
6689162	Wet Soluble Calcium (Ca)	2013/03/27					<5.0	mg/L	NC	30		
6689162	Wet Soluble Magnesium (Mg)	2013/03/27					<5.0	mg/L	NC	30		
6689162	Wet Soluble Potassium (K)	2013/03/27					<20	mg/L	NC	30		
6689162	Wet Soluble Sodium (Na)	2013/03/27					<5.0	mg/L	2.0	30		
6689162	Wet Soluble Sulphur (S)	2013/03/27					<30	mg/L	NC	30		
6689174	200 mesh (>.075 mm)	2013/03/27							3.0	35		
6689174	200 mesh (<.075 mm)	2013/03/27							2.8	35		

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Maxxam Job #: B323383
Report Date: 2013/03/27

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Location: COLWOOD 18
Your P.O. #: 700250162

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6689422	Soluble Chloride (Cl)	2013/03/27					<5.0	mg/L	4.5	30		
6689425	Soluble Sulphate (SO4)	2013/03/27					<10	mg/L	3.0	30		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162	B323383	354772
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:		C#354772-20-01	Kim Dennis
Phone:	(604)775-6810 Fax: (604)775-6850	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	ME		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS: Please report condition of custody seal.

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [X]
1 Day [X] 2 Day [ ] 3 Day [ ] Date Required: RUSH
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FZ3853	SP13-215-130323	13-03-23		Soil				X	X			X				2	
2	FZ3854	216							X	X			X					
3	FZ3855	217							X	X			X					
4	FZ3856	218							X	X			X					
5	FZ3857	219							X	X			X					
6	FZ3858	220							X	X			X					
7	FZ3859	220-01							X	X			X					
8	FZ3860	221							X	X			X					B323383
9	FZ3861	222							X	X			X					
10	FZ3862	223							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
ME / MARKE DAVIDS	13/03/25	06:20	[illegible signature]	25/03/25	09:50		[ ]	1.1 / 2.2	[X] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free:(800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		354072
Address:	641- 800 BURRARD STREET	Address:	202 - 3440 DOUGLAS STREET	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 3L5	Project Name:			
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Site #:	Colwood 18, Victoria, BC	C#364772-21-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Sampled By:	ME		

REGULATORY CRITERIA:
- [x] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other: _____

SPECIAL INSTRUCTIONS: Please report condition of custody seal.

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified):
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): [X]
1 Day [X] 2 Day [ ] 3 Day [ ] Date Required: RUSH
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FZ3870	SP13-224-130323	13-03-23		Soil		X	X	X	X	X		X					
2	FZ3871	SP13-225-130324	13-03-24						X	X			X					
3	FZ3872	226							X	X			X					
4	FZ3873	227							X	X			X					
5	FZ3874	228							X	X			X					B223363
6	FZ3875	229							X	X			X					
7	FZ3876	230					X	X	X	X	X		X					
8	FZ3877	230-01					X	X	X	X	X		X					
9	FZ3878	231							X	X			X					
10	FZ3879	232							X	X			X					

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
M.Ed / MARK EDWARDS	13/03/25	0620	[illegible]	13/03/25	09:50		[ ]	4.1/2.2	[x] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1758 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#17306 SNC LAVALIN ENVIRONMENT INC.	Quotation #:	B21275	MAXXAM JOB #:	BOTTLE ORDER #: 354272
Contact Name:	Brad Klaver	Contact Name:	Rob Stacey (cc: Mark & Chris)	P.O. #:	TA# 700250162		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	202 - 3440 DOUGLAS STREET VICTORIA BC V8Z 3L5	Project #:	511828	CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-6810 Fax: (604)775-6650	Phone:	(250)385-5028 Fax: (250)385-5038	Project Name:		C#054772-22-01	Kim Domino
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	rob.stacey@snclavalin.com; envwestbclabdata@s	Site #:	Colwood 18, Victoria, BC		
				Sampled By:	ME		

REGULATORY CRITERIA:
- [X] CSR
- [X] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS: Pls. report condition of Custody Seal.

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [ ]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [X]
1 Day [X] 2 Day [ ] 3 Day [ ] Date Required: RUSH
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CCME BTEX/F1 in Soil	CCME Hydrocarbons (F2-F4)	CCME PAH in Sediments	CSR/CCME Metals in Soil	EPH in soil	Particulate Mesh 200	Salinity 4 Package for Soil	TCLP Metals			# of Bottles	Comments
1	FZ3891	SP13-233-130324	13-03-24		Soil				X	X		X	X				2	
2	FZ3892	" -234- "	"		"				X	X			X				"	
3																		
4																		
5																		
6																		
7																		3323383
8																		
9																		
10																		

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
M.E. / MARK EDWARDS	13/03/25	0620	[illegible]	2013/03/25	09:50		[ ]	4.1/2.2.2	[X] Yes [ ] No

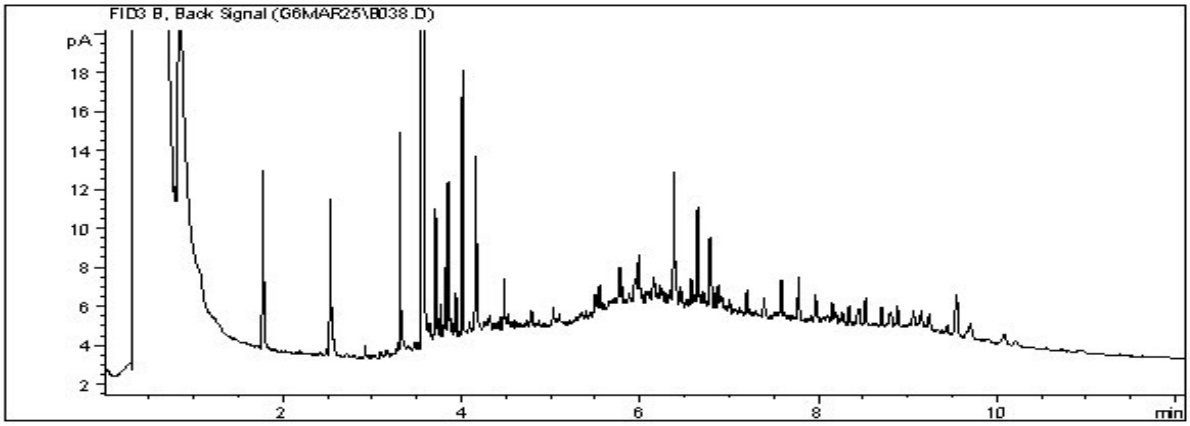
*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

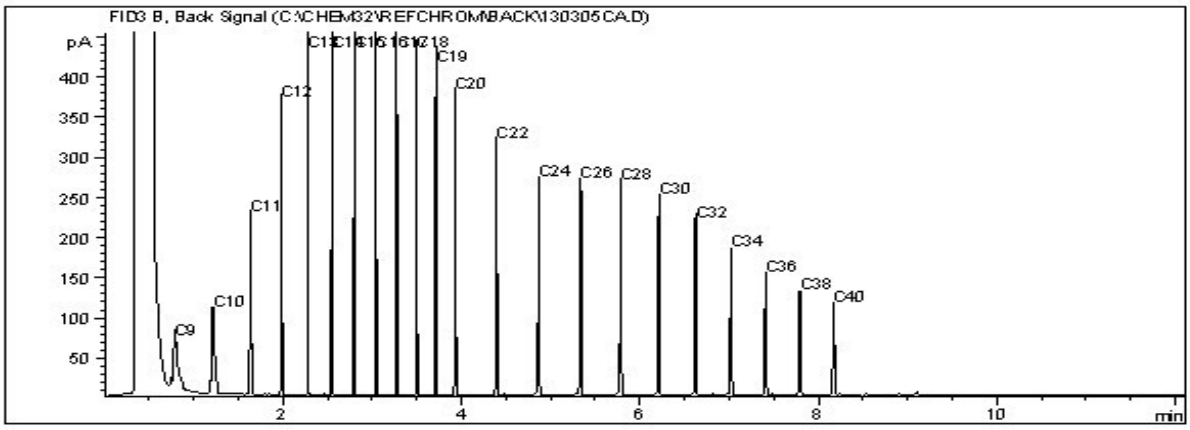
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3870

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-224-130323

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

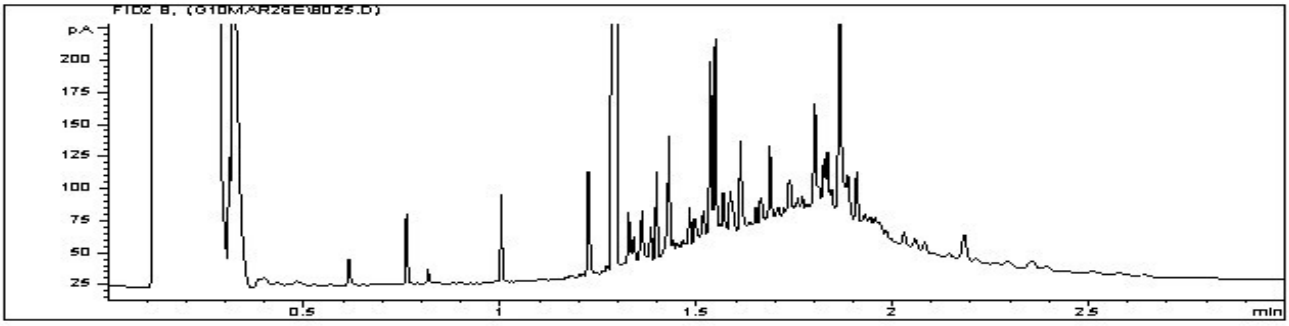
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

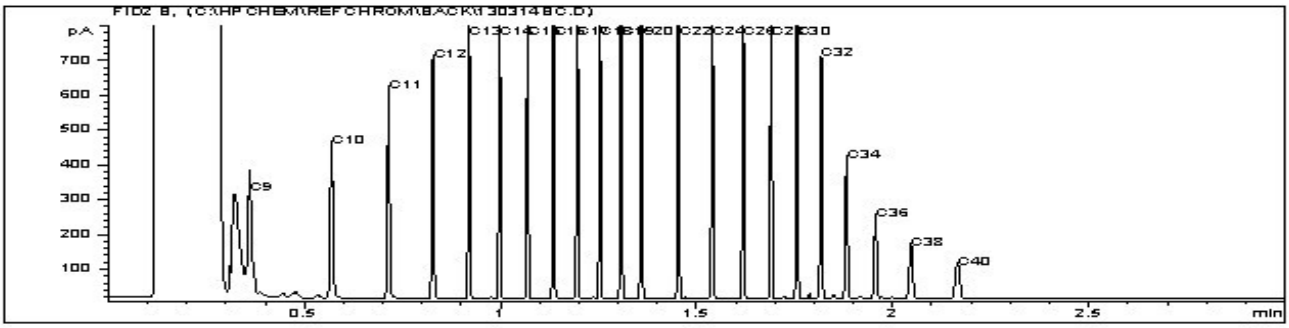
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3870

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-224-130323

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

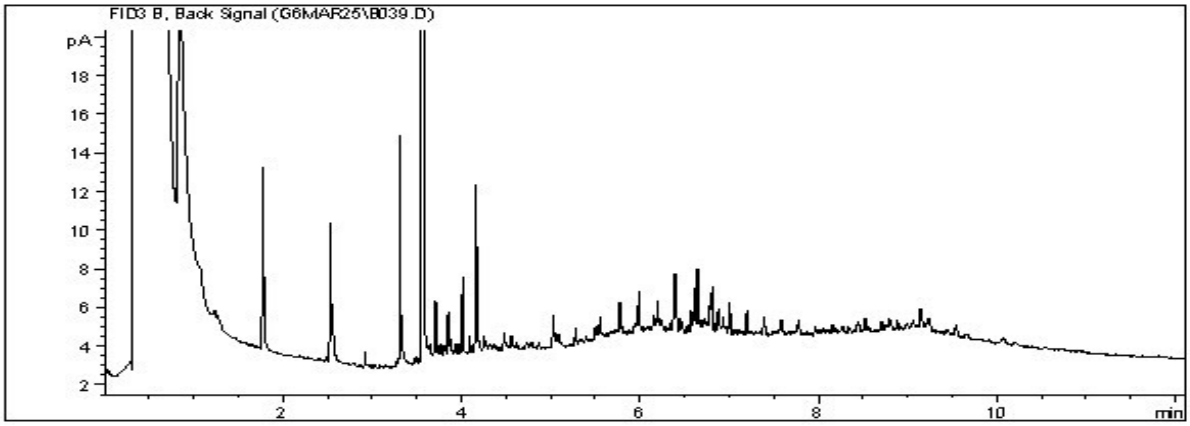
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

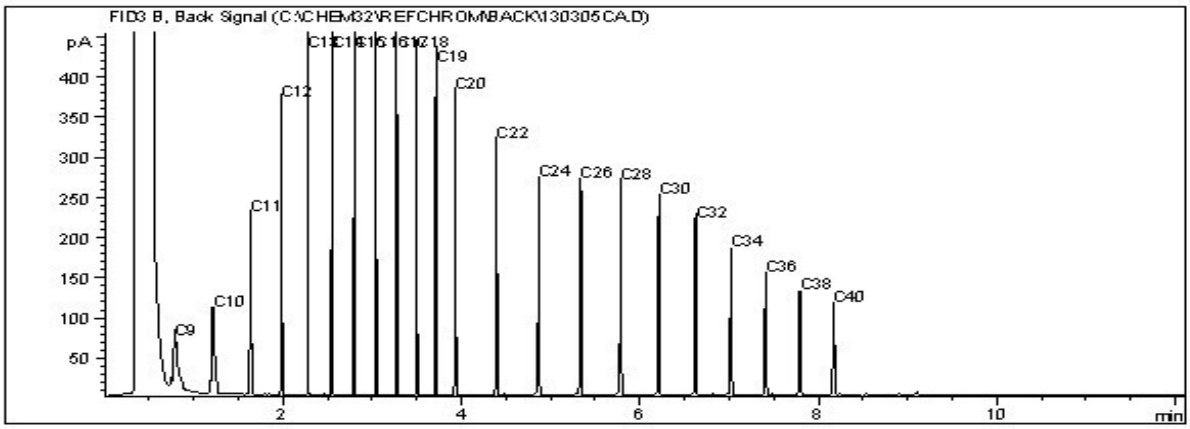
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3876

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-230-130324

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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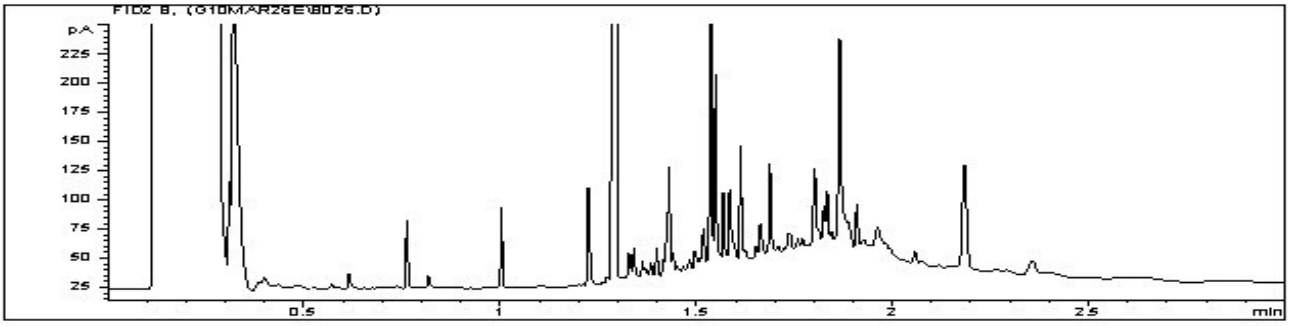
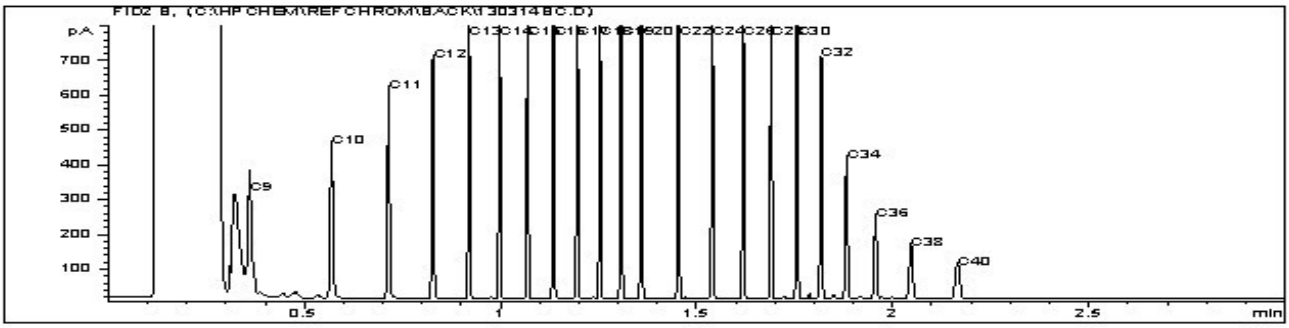
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3876

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-230-130324

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

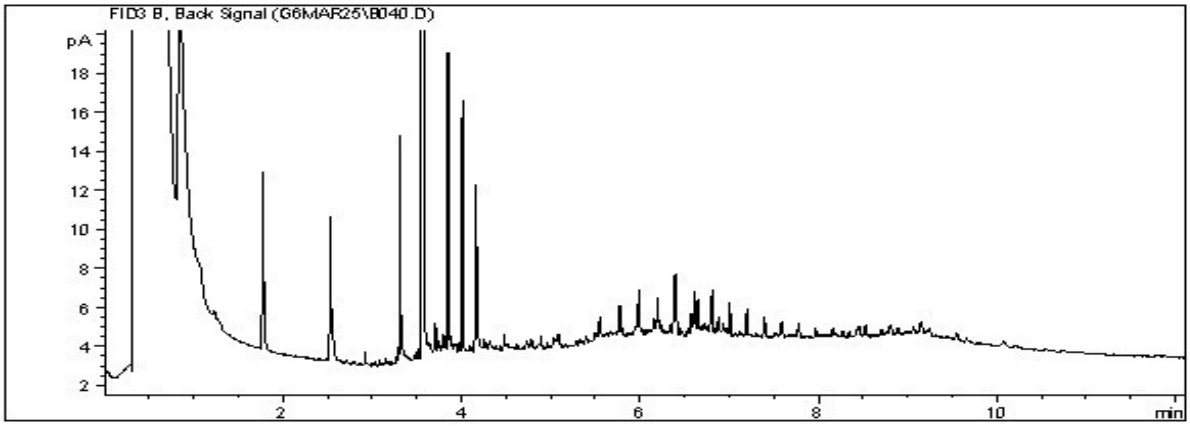
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

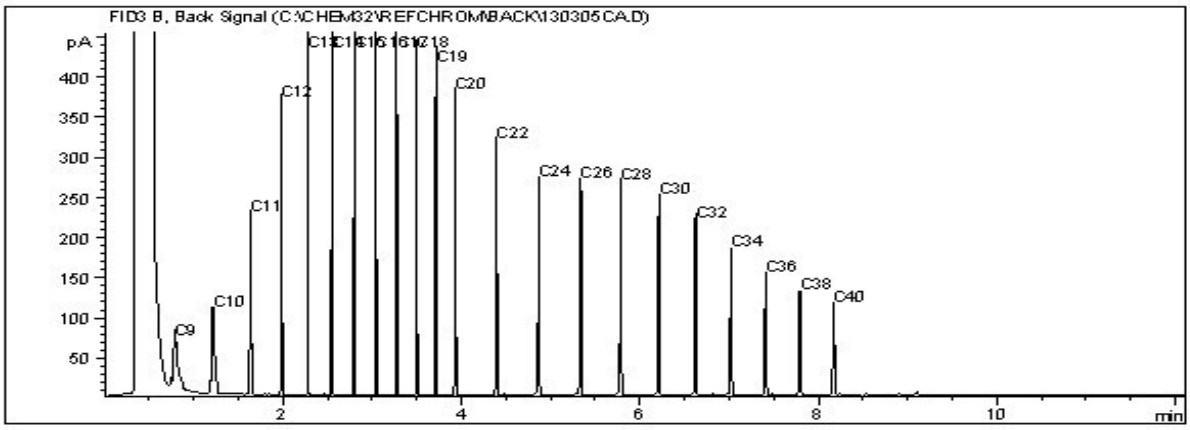
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3877

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-230-01-130324

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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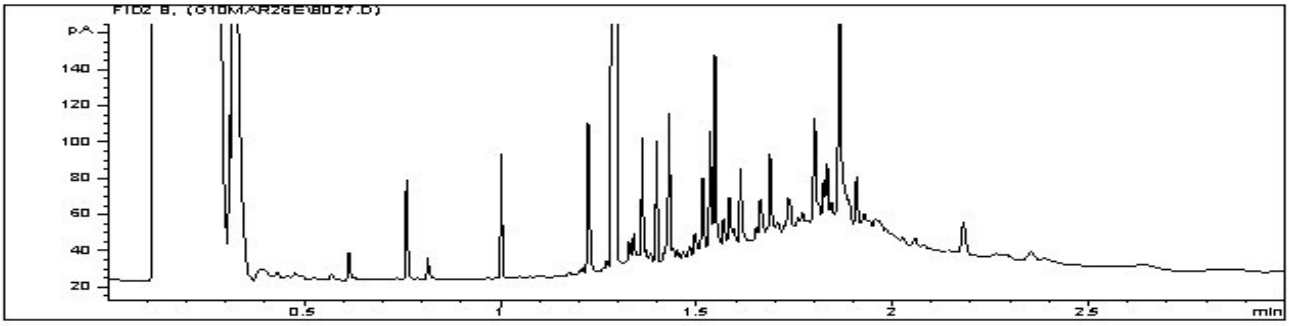
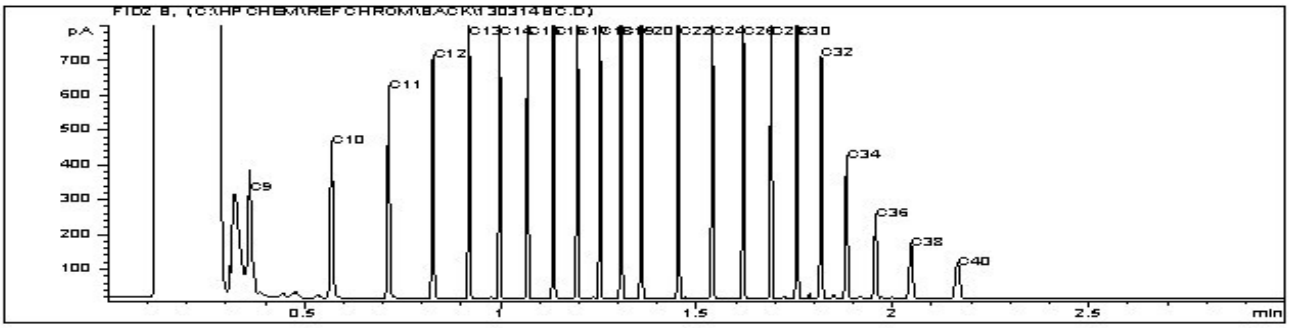
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3877

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-230-01-130324

BC Hydrocarbons in Soil by GC/FID Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

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Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

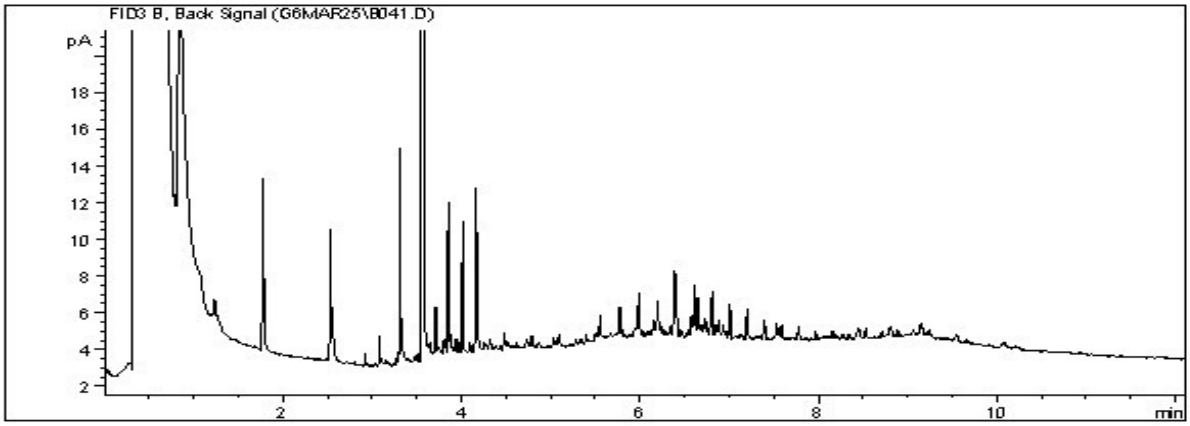
Page 1 of 1

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

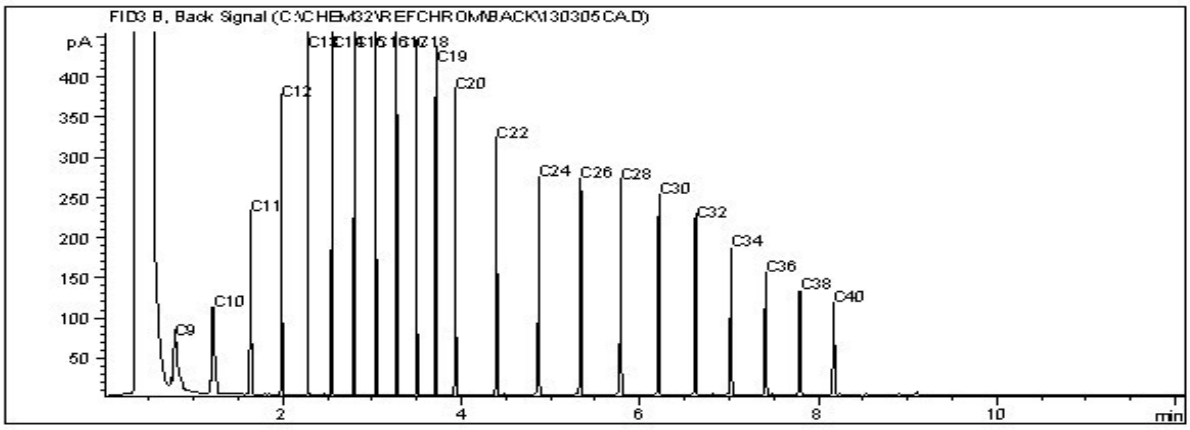
Report Date: 2013/03/27
Maxxam Job #: B323383
Maxxam Sample: FZ3877 Lab-Dup

SNC LAVALIN ENVIRONMENT INC.
Client Project #: 511828
Site Reference: COLWOOD 18
Client ID: SP13-230-01-130324

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

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Success Through Science®

Your P.O. #: 700261278
Your Project #: 205.03633.00000
Site Location: COLWOOD 43
Your C.O.C. #: 40495103, 40495101

Attention: Aaron Haegele
SLR CONSULTING (CANADA) LTD
6-40 CADILLAC AVENUE
VICTORIA, BC
CANADA V8Z 1T2

Report Date: 2013/07/25

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B361535
Received: 2013/07/18, 07:50

Sample Matrix: Soil
Samples Received: 18

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	12	2013/07/20	2013/07/22	BBY6SOP-00011	SM-4500-Cl-
Soluble Chloride Ion	12	N/A	2013/07/23	BBY WI-00033	Calculated Parameter
Elements by ICPMS (total)	1	2013/07/20	2013/07/21	BBY7SOP-00004	BCMOE-SALM
Elements by ICPMS (total)	17	2013/07/21	2013/07/21	BBY7SOP-00004	BCMOE-SALM
Moisture	18	N/A	2013/07/21	BBY8SOP-00017	Ont MOE -E 3139
Soluble Sodium Ion	12	N/A	2013/07/22	BBY WI-00033	Calculated Parameter
PAH in Soil by GC/MS (SIM) - CCME	5	2013/07/19	2013/07/24	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	13	2013/07/20	2013/07/24	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	18	N/A	2013/07/25	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	18	N/A	2013/07/25	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	1	2013/07/21	2013/07/21	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	17	2013/07/22	2013/07/22	BBY6SOP-00028	Carter, SSMA 16.2
Saturated Paste	12	2013/07/20	2013/07/20	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Cations (Ca,K,Mg,Na,S)	12	N/A	2013/07/22	BBY7SOP-00018	Carter Method 5.2

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Crystal Ireland, B.Sc., Account Specialist
Email: CIreland@maxxam.ca
Phone# (604) 638-5016

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Maxxam

Success Through Science®

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

PHYSICAL TESTING (SOIL)

Maxxam ID		GY4141		GY4142	GY4143		GY4144		GY4145		GY4146		
Sampling Date		2013/07/17		2013/07/17	2013/07/17		2013/07/17		2013/07/17		2013/07/17		
	UNITS	**SP-01**	**QC Batch**	**SP-02**	**SP-03**	**QC Batch**	**SP-04**	**QC Batch**	**SP-05**	**QC Batch**	**SP-06**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	19	7001762	19	19	7001796	16	7001762	21	7001796	20	0.30	7001762

Maxxam ID		GY4147	GY4148	GY4149	GY4150	GY4151	GY4152	GY4153	GY4154		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/16	2013/07/16		
	UNITS	**SP-07**	**SP-08**	**SP-09**	**SP-10**	**SP-11**	**SP-12**	**CS-01**	**CS-02**	**RDL**	**QC Batch**
Physical Properties											
Moisture	%	24	28	26	22	20	29	9.1	43	0.30	7001762

Maxxam ID		GY4155		GY4156		GY4157		GY4158		
Sampling Date		2013/07/16		2013/07/16		2013/07/16		2013/07/16		
	UNITS	**CS-03**	**QC Batch**	**CS-04**	**QC Batch**	**CS-05**	**QC Batch**	**CS-06**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	7.7	7001762	47	7001796	31	7001762	10	0.30	7001796

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY4141	GY4142	GY4143	GY4144	GY4145	GY4146	GY4147	GY4148		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17		
	UNITS	**SP-01**	**SP-02**	**SP-03**	**SP-04**	**SP-05**	**SP-06**	**SP-07**	**SP-08**	**RDL**	**QC Batch**
Physical Properties											
Soluble (2:1) pH	pH Units	12.3	12.3	12.4	12.3	12.4	12.1(1)	12.4	12.4	0.010	7006219
Total Metals by ICPMS											
Total Aluminum (Al)	mg/kg	9430	8730	8410	10600	8080	8700	6540	4550	100	7006216
Total Antimony (Sb)	mg/kg	0.61	1.46	1.39	0.63	0.75	1.06	0.44	0.36	0.10	7006216
Total Arsenic (As)	mg/kg	2.05	3.74	4.12	3.27	2.47	1.73	1.32	<0.50	0.50	7006216
Total Barium (Ba)	mg/kg	61.9	60.9	84.2	67.2	61.9	139	54.3	44.4	0.10	7006216
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7006216
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7006216
Total Cadmium (Cd)	mg/kg	0.141	0.131	0.128	0.168	0.149	0.127	0.123	0.109	0.050	7006216
Total Calcium (Ca)	mg/kg	170000	169000	161000	145000	171000	170000	221000	158000	100	7006216
Total Chromium (Cr)	mg/kg	15.7	13.0	11.9	18.6	11.4	14.4	9.0	5.6	1.0	7006216
Total Cobalt (Co)	mg/kg	5.95	5.64	5.71	7.00	5.40	5.70	3.76	2.33	0.30	7006216
Total Copper (Cu)	mg/kg	26.3	29.6	27.6	40.6	26.7	43.3	16.3	12.6	0.50	7006216
Total Iron (Fe)	mg/kg	12800	12200	13200	15000	11500	14100	8790	5970	100	7006216
Total Lead (Pb)	mg/kg	18.7	20.0	24.4	21.3	16.0	17.8	17.3	15.7	0.10	7006216
Total Lithium (Li)	mg/kg	<5.0	<5.0	<5.0	5.2	<5.0	<5.0	<5.0	<5.0	5.0	7006216
Total Magnesium (Mg)	mg/kg	13300	12500	12300	11700	11800	11400	17200	19300	100	7006216
Total Manganese (Mn)	mg/kg	380	483	478	433	384	444	332	258	0.20	7006216
Total Mercury (Hg)	mg/kg	<0.050	0.059	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7006216
Total Molybdenum (Mo)	mg/kg	0.69	0.76	0.97	0.79	0.64	2.10	0.63	0.57	0.10	7006216
Total Nickel (Ni)	mg/kg	10.5	9.75	9.86	14.0	9.91	10.1	7.26	4.87	0.80	7006216
Total Phosphorus (P)	mg/kg	519	561	696	653	523	865	408	341	10	7006216
Total Potassium (K)	mg/kg	383	352	332	544	325	488	461	310	100	7006216
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7006216
Total Silver (Ag)	mg/kg	<0.050	<0.050	0.067	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7006216
Total Sodium (Na)	mg/kg	559	552	491	319	498	662	1060	1350	100	7006216
Total Strontium (Sr)	mg/kg	356	323	299	232	266	306	426	383	0.10	7006216
Total Thallium (Tl)	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7006216
Total Tin (Sn)	mg/kg	1.68	1.63	3.13	0.77	1.35	1.75	0.86	0.90	0.10	7006216
Total Titanium (Ti)	mg/kg	482	468	421	565	463	444	364	232	1.0	7006216
Total Uranium (U)	mg/kg	1.48	1.46	1.58	1.41	1.54	1.60	1.78	1.44	0.050	7006216
Total Vanadium (V)	mg/kg	35.3	34.2	30.2	39.1	28.7	29.8	22.9	15.9	2.0	7006216
Total Zinc (Zn)	mg/kg	39.8	54.9	51.0	104	40.1	192	29.6	22.2	1.0	7006216
Total Zirconium (Zr)	mg/kg	1.50	1.53	0.98	2.09	1.31	1.16	1.46	0.86	0.50	7006216

RDL = Reportable Detection Limit
(1) - Due to insufficient sample water:soil extration ratio has changed from 2:1 to 4:1 in order to analyse sample.

Maxxam

Success Through Science®

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY4149	GY4150		GY4151	GY4152	GY4153		
Sampling Date		2013/07/17	2013/07/17		2013/07/17	2013/07/17	2013/07/16		
	UNITS	**SP-09**	**SP-10**	**QC Batch**	**SP-11**	**SP-12**	**CS-01**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	12.3	12.4	7006219	12.0	12.4	8.00	0.010	7006222
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	6950	9620	7006216	8280	5320	4080	100	7006221
Total Antimony (Sb)	mg/kg	0.56	0.57	7006216	1.10	0.44	0.74	0.10	7006221
Total Arsenic (As)	mg/kg	1.77	1.76	7006216	3.40	1.67	1.56	0.50	7006221
Total Barium (Ba)	mg/kg	55.1	58.0	7006216	55.1	40.7	41.8	0.10	7006221
Total Beryllium (Be)	mg/kg	<0.40	<0.40	7006216	<0.40	<0.40	<0.40	0.40	7006221
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	7006216	<0.10	<0.10	<0.10	0.10	7006221
Total Cadmium (Cd)	mg/kg	0.125	0.163	7006216	0.145	0.104	0.170	0.050	7006221
Total Calcium (Ca)	mg/kg	171000	165000	7006216	141000	153000	133000	100	7006221
Total Chromium (Cr)	mg/kg	10.1	15.9	7006216	13.2	6.9	5.1	1.0	7006221
Total Cobalt (Co)	mg/kg	4.66	9.23	7006216	5.57	3.26	2.73	0.30	7006221
Total Copper (Cu)	mg/kg	20.5	27.1	7006216	31.6	14.9	14.1	0.50	7006221
Total Iron (Fe)	mg/kg	10700	13200	7006216	14500	6870	6940	100	7006221
Total Lead (Pb)	mg/kg	17.9	17.0	7006216	18.5	15.0	17.3	0.10	7006221
Total Lithium (Li)	mg/kg	<5.0	<5.0	7006216	<5.0	<5.0	<5.0	5.0	7006221
Total Magnesium (Mg)	mg/kg	19000	17900	7006216	17300	26600	3180	100	7006221
Total Manganese (Mn)	mg/kg	356	418	7006216	396	317	244	0.20	7006221
Total Mercury (Hg)	mg/kg	<0.050	<0.050	7006216	<0.050	<0.050	<0.050	0.050	7006221
Total Molybdenum (Mo)	mg/kg	0.61	0.55	7006216	0.59	0.59	1.78	0.10	7006221
Total Nickel (Ni)	mg/kg	9.03	12.1	7006216	11.3	6.24	4.99	0.80	7006221
Total Phosphorus (P)	mg/kg	451	458	7006216	534	386	344	10	7006221
Total Potassium (K)	mg/kg	393	349	7006216	389	389	139	100	7006221
Total Selenium (Se)	mg/kg	<0.50	<0.50	7006216	<0.50	<0.50	<0.50	0.50	7006221
Total Silver (Ag)	mg/kg	<0.050	<0.050	7006216	<0.050	<0.050	<0.050	0.050	7006221
Total Sodium (Na)	mg/kg	1570	712	7006216	798	1450	<100	100	7006221
Total Strontium (Sr)	mg/kg	391	378	7006216	370	414	304	0.10	7006221
Total Thallium (Tl)	mg/kg	<0.050	<0.050	7006216	<0.050	<0.050	<0.050	0.050	7006221
Total Tin (Sn)	mg/kg	1.21	8.65	7006216	1.69	0.90	2.08	0.10	7006221
Total Titanium (Ti)	mg/kg	415	600	7006216	435	322	243	1.0	7006221
Total Uranium (U)	mg/kg	1.51	1.30	7006216	1.35	1.79	0.965	0.050	7006221
Total Vanadium (V)	mg/kg	27.4	36.0	7006216	31.1	20.4	13.9	2.0	7006221
Total Zinc (Zn)	mg/kg	36.3	41.3	7006216	37.9	23.3	52.3	1.0	7006221
Total Zirconium (Zr)	mg/kg	1.32	2.16	7006216	1.33	1.52	<0.50	0.50	7006221

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY4154		GY4155		GY4156	GY4157	GY4158		
Sampling Date		2013/07/16		2013/07/16		2013/07/16	2013/07/16	2013/07/16		
	UNITS	**CS-02**	**QC Batch**	**CS-03**	**QC Batch**	**CS-04**	**CS-05**	**CS-06**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	10.2	7006219	8.41	7005605	10.1	9.47	8.91	0.010	7006219
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	2450	7006216	3420	7005601	1880	4550	10200	100	7006216
Total Antimony (Sb)	mg/kg	1.29	7006216	0.90	7005601	0.85	1.58	0.12	0.10	7006216
Total Arsenic (As)	mg/kg	1.18	7006216	1.56	7005601	0.84	1.63	1.85	0.50	7006216
Total Barium (Ba)	mg/kg	79.1	7006216	45.5	7005601	54.2	59.4	35.2	0.10	7006216
Total Beryllium (Be)	mg/kg	<0.40	7006216	<0.40	7005601	<0.40	<0.40	<0.40	0.40	7006216
Total Bismuth (Bi)	mg/kg	<0.10	7006216	<0.10	7005601	<0.10	<0.10	<0.10	0.10	7006216
Total Cadmium (Cd)	mg/kg	0.111	7006216	0.157	7005601	0.134	0.180	0.279	0.050	7006216
Total Calcium (Ca)	mg/kg	159000	7006216	179000	7005601	211000	220000	6980	100	7006216
Total Chromium (Cr)	mg/kg	3.1	7006216	5.1	7005601	2.6	4.0	15.6	1.0	7006216
Total Cobalt (Co)	mg/kg	0.89	7006216	1.90	7005601	1.35	1.97	6.53	0.30	7006216
Total Copper (Cu)	mg/kg	8.55	7006216	11.2	7005601	10.3	15.5	23.6	0.50	7006216
Total Iron (Fe)	mg/kg	3160	7006216	5670	7005601	4370	4940	16600	100	7006216
Total Lead (Pb)	mg/kg	17.9	7006216	21.3	7005601	17.9	52.3	1.91	0.10	7006216
Total Lithium (Li)	mg/kg	<5.0	7006216	<5.0	7005601	<5.0	<5.0	8.0	5.0	7006216
Total Magnesium (Mg)	mg/kg	5900	7006216	5200	7005601	10700	30500	5600	100	7006216
Total Manganese (Mn)	mg/kg	212	7006216	164	7005601	248	272	224	0.20	7006216
Total Mercury (Hg)	mg/kg	<0.050	7006216	<0.050	7005601	<0.050	<0.050	<0.050	0.050	7006216
Total Molybdenum (Mo)	mg/kg	1.38	7006216	1.86	7005601	1.47	1.76	0.17	0.10	7006216
Total Nickel (Ni)	mg/kg	2.27	7006216	4.35	7005601	2.37	3.65	13.7	0.80	7006216
Total Phosphorus (P)	mg/kg	459	7006216	245	7005601	142	326	424	10	7006216
Total Potassium (K)	mg/kg	138	7006216	158	7005601	106	335	568	100	7006216
Total Selenium (Se)	mg/kg	<0.50	7006216	<0.50	7005601	<0.50	<0.50	<0.50	0.50	7006216
Total Silver (Ag)	mg/kg	<0.050	7006216	<0.050	7005601	<0.050	<0.050	0.084	0.050	7006216
Total Sodium (Na)	mg/kg	604	7006216	282	7005601	338	3150	1050	100	7006216
Total Strontium (Sr)	mg/kg	1150	7006216	336	7005601	481	560	25.6	0.10	7006216
Total Thallium (Tl)	mg/kg	<0.050	7006216	<0.050	7005601	<0.050	<0.050	<0.050	0.050	7006216
Total Tin (Sn)	mg/kg	2.05	7006216	1.66	7005601	1.90	23.9	0.16	0.10	7006216
Total Titanium (Ti)	mg/kg	110	7006216	149	7005601	103	245	952	1.0	7006216
Total Uranium (U)	mg/kg	1.51	7006216	1.28	7005601	2.34	2.97	0.247	0.050	7006216
Total Vanadium (V)	mg/kg	9.9	7006216	11.8	7005601	7.3	13.7	50.2	2.0	7006216
Total Zinc (Zn)	mg/kg	16.8	7006216	27.9	7005601	30.6	58.5	31.3	1.0	7006216
Total Zirconium (Zr)	mg/kg	<0.50	7006216	0.57	7005601	<0.50	1.38	4.19	0.50	7006216

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		GY4141		GY4142		GY4143		GY4144		GY4145		GY4146		GY4147		
Sampling Date		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		
	UNITS	**SP-01**	**RDL**	**SP-02**	**RDL**	**SP-03**	**RDL**	**SP-04**	**RDL**	**SP-05**	**RDL**	**SP-06**	**RDL**	**SP-07**	**RDL**	**QC Batch**
ANIONS																
Soluble Chloride (Cl)	mg/L	698	5.0	731	5.0	618	5.0	258	5.0	745	5.0	369	5.0	1800	5.0	7009518
Calculated Parameters																
Soluble Chloride (Cl)	mg/kg	582	4.2	548	3.7	495	4.0	181	3.5	581	3.9	282	3.8	1290	3.6	7001287
Soluble Sodium (Na)	mg/kg	177	4.2	154	3.7	152	4.0	44.9	3.5	185	3.9	65.7	3.8	549	3.6	7001289
Soluble Parameters																
Saturation %	%	83.4	1.0	74.9	1.0	80.0	1.0	69.9	1.0	78.0	1.0	76.5	1.0	71.8	1.0	7005609
Wet Soluble Sodium (Na)	mg/L	212	5.0	206	5.0	190	5.0	64.3	5.0	237	5.0	85.9	5.0	764	5.0	7007347

Maxxam ID		GY4148		GY4149		GY4150		GY4151		GY4152		
Sampling Date		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		
	UNITS	**SP-08**	**RDL**	**SP-09**	**RDL**	**SP-10**	**RDL**	**SP-11**	**RDL**	**SP-12**	**RDL**	**QC Batch**
ANIONS												
Soluble Chloride (Cl)	mg/L	2750	50	3000	50	1080	5.0	1590	5.0	2250	50	7009518
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	2020	37	1990	33	784	3.6	971	3.1	1750	39	7001287
Soluble Sodium (Na)	mg/kg	951	3.7	945	3.3	290	3.6	370	3.1	898	3.9	7001289
Soluble Parameters												
Saturation %	%	73.4	1.0	66.3	1.0	72.9	1.0	61.2	1.0	78.0	1.0	7005609
Wet Soluble Sodium (Na)	mg/L	1300	5.0	1420	5.0	398	5.0	605	5.0	1150	5.0	7007347

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY4141	GY4142	GY4143	GY4144		GY4145		GY4146	GY4147		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17		2013/07/17		2013/07/17	2013/07/17		
	UNITS	**SP-01**	**SP-02**	**SP-03**	**SP-04**	**RDL**	**SP-05**	**RDL**	**SP-06**	**SP-07**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	1.9	1.7	0.79	1.2	0.10	5.0	0.10	0.87	1.2	0.10	7001290
Benzo[a]pyrene equivalency	N/A	0.15	0.14	<0.10	<0.10	0.10	0.43	0.10	<0.10	0.10	0.10	7001290
Polycyclic Aromatics												
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	7013758
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	0.020	7013758
Acenaphthylene	mg/kg	0.011	0.0099	0.0056	0.0068	0.0050	0.045	0.0050	0.0055	0.0071	0.0050	7013758
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.020	0.0050	7013758
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.020	<0.020	0.020	<0.020	0.030	0.020	7013758
Phenanthrene	mg/kg	0.073	0.097	0.064	0.045	0.020	0.43	0.020	0.044	0.38	0.020	7013758
Anthracene	mg/kg	0.014	0.020	0.0086	0.011	0.0040	0.095	0.0040	0.0082	0.028	0.0040	7013758
Fluoranthene	mg/kg	0.17	0.20	0.092	0.10	0.020	0.90	0.020	0.16	0.21	0.020	7013758
Pyrene	mg/kg	0.15	0.17	0.073	0.089	0.020	0.92	0.020	0.10	0.14	0.020	7013758
Benzo(a)anthracene	mg/kg	0.082	0.082	0.036	0.054	0.020	0.31	0.020	0.038	0.061	0.020	7013758
Chrysene	mg/kg	0.11	0.12	0.053	0.078	0.020	0.38	0.020	0.056	0.082	0.020	7013758
Benzo(b&j)fluoranthene	mg/kg	0.15	0.13	0.060	0.088	0.020	0.40	0.020	0.071	0.091	0.020	7013758
Benzo(b)fluoranthene	mg/kg	0.085	0.079	0.038	0.055	0.020	0.23	0.020	0.044	0.057	0.020	7013758
Benzo(k)fluoranthene	mg/kg	0.040	0.037	<0.020	0.027	0.020	<0.12 (1)	0.12	<0.020	0.028	0.020	7013758
Benzo(a)pyrene	mg/kg	0.089	0.079	0.035	0.048	0.020	0.30	0.020	0.040	0.055	0.020	7013758
Indeno(1,2,3-cd)pyrene	mg/kg	0.060	0.051	<0.050	<0.050	0.050	0.16	0.050	<0.050	<0.050	0.050	7013758
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	7013758
Benzo(g,h,i)perylene	mg/kg	0.073	0.063	<0.050	<0.050	0.050	0.18	0.050	<0.050	<0.050	0.050	7013758
Low Molecular Weight PAH`s	mg/kg	0.099	0.13	0.078	0.063	0.050	0.57	0.050	0.058	0.47	0.050	7001291
High Molecular Weight PAH`s	mg/kg	1.0	1.0	0.39	0.54	0.050	3.8	0.12	0.51	0.73	0.050	7001291
Total PAH	mg/kg	1.1	1.1	0.47	0.60	0.050	4.4	0.12	0.57	1.2	0.050	7001291
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	97	90	94	100		96		98	102		7013758
D8-ACENAPHTHYLENE (sur.)	%	93	89	97	99		93		95	100		7013758
D8-NAPHTHALENE (sur.)	%	95	87	94	98		94		95	100		7013758
TERPHENYL-D14 (sur.)	%	95	88	94	99		93		97	101		7013758

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY4148	GY4149	GY4150	GY4151	GY4152	GY4153		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/16		
	UNITS	**SP-08**	**SP-09**	**SP-10**	**SP-11**	**SP-12**	**CS-01**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	1.1	1.2	4.9	1.7	1.7	0.52	0.10	7001290
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	0.36	0.13	0.13	<0.10	0.10	7001290
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	0.010	7013758
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7013758
Acenaphthylene	mg/kg	<0.0050	0.0056	0.051	0.0072	<0.0050	0.019	0.0050	7013758
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	7013758
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7013758
Phenanthrene	mg/kg	0.057	0.062	0.19	0.094	0.097	0.065	0.020	7013758
Anthracene	mg/kg	0.012	0.0092	0.047	0.015	0.018	0.010	0.0040	7013758
Fluoranthene	mg/kg	0.11	0.12	0.54	0.18	0.19	0.095	0.020	7013758
Pyrene	mg/kg	0.092	0.10	0.44	0.17	0.14	0.051	0.020	7013758
Benzo(a)anthracene	mg/kg	0.050	0.050	0.25	0.082	0.083	<0.020	0.020	7013758
Chrysene	mg/kg	0.070	0.074	0.31	0.11	0.11	0.045	0.020	7013758
Benzo(b&j)fluoranthene	mg/kg	0.082	0.090	0.38	0.13	0.13	0.042	0.020	7013758
Benzo(b)fluoranthene	mg/kg	0.051	0.055	0.22	0.076	0.085	0.030	0.020	7013758
Benzo(k)fluoranthene	mg/kg	0.022	0.023	0.13	0.040	0.037	<0.020	0.020	7013758
Benzo(a)pyrene	mg/kg	0.049	0.052	0.24	0.077	0.074	<0.020	0.020	7013758
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	0.15	<0.050	<0.050	<0.050	0.050	7013758
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7013758
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	0.15	0.054	0.054	<0.050	0.050	7013758
Low Molecular Weight PAH`s	mg/kg	0.069	0.076	0.29	0.12	0.11	0.11	0.050	7001291
High Molecular Weight PAH`s	mg/kg	0.52	0.56	2.8	0.91	0.90	0.26	0.050	7001291
Total PAH	mg/kg	0.59	0.64	3.1	1.0	1.0	0.37	0.050	7001291
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	102	101	97	96	98	89		7013758
D8-ACENAPHTHYLENE (sur.)	%	100	102	98	95	96	99		7013758
D8-NAPHTHALENE (sur.)	%	99	100	97	94	94	100		7013758
TERPHENYL-D14 (sur.)	%	99	100	95	95	96	93		7013758

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY4154		GY4155		GY4156	GY4157	GY4158		
Sampling Date		2013/07/16		2013/07/16		2013/07/16	2013/07/16	2013/07/16		
	UNITS	**CS-02**	**RDL**	**CS-03**	**RDL**	**CS-04**	**CS-05**	**CS-06**	**RDL**	**QC Batch**
Calculated Parameters										
Index of Additive Cancer Risk(IARC)	N/A	1.8	0.10	2.0	0.10	0.31	0.31	0.31	0.10	7001290
Benzo[a]pyrene equivalency	N/A	0.14	0.10	0.16	0.10	<0.10	<0.10	<0.10	0.10	7001290
Polycyclic Aromatics										
Naphthalene	mg/kg	<0.010	0.010	<0.010	0.010	<0.010	0.014	<0.010	0.010	7013758
2-Methylnaphthalene	mg/kg	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	0.020	7013758
Acenaphthylene	mg/kg	0.0084	0.0050	0.019	0.0050	<0.0050	0.0091	<0.0050	0.0050	7013758
Acenaphthene	mg/kg	<0.0050	0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	0.0050	7013758
Fluorene	mg/kg	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	0.020	7013758
Phenanthrene	mg/kg	0.060	0.020	0.041	0.020	<0.020	0.038	<0.020	0.020	7013758
Anthracene	mg/kg	0.017	0.0040	0.016	0.0040	<0.0040	<0.0040	<0.0040	0.0040	7013758
Fluoranthene	mg/kg	0.14	0.020	0.14	0.020	<0.020	0.034	<0.020	0.020	7013758
Pyrene	mg/kg	0.12	0.020	0.12	0.020	<0.020	0.028	<0.020	0.020	7013758
Benzo(a)anthracene	mg/kg	0.081	0.020	0.095	0.020	<0.020	<0.020	<0.020	0.020	7013758
Chrysene	mg/kg	0.11	0.020	<0.12(1)	0.12	<0.020	<0.020	<0.020	0.020	7013758
Benzo(b&j)fluoranthene	mg/kg	0.13	0.020	0.16	0.020	<0.020	<0.020	<0.020	0.020	7013758
Benzo(b)fluoranthene	mg/kg	0.085	0.020	0.094	0.020	<0.020	<0.020	<0.020	0.020	7013758
Benzo(k)fluoranthene	mg/kg	0.040	0.020	0.047	0.020	<0.020	<0.020	<0.020	0.020	7013758
Benzo(a)pyrene	mg/kg	0.083	0.020	0.095	0.020	<0.020	<0.020	<0.020	0.020	7013758
Indeno(1,2,3-cd)pyrene	mg/kg	0.052	0.050	0.057	0.050	<0.050	<0.050	<0.050	0.050	7013758
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7013758
Benzo(g,h,i)perylene	mg/kg	0.062	0.050	0.058	0.050	<0.050	<0.050	<0.050	0.050	7013758
Low Molecular Weight PAH`s	mg/kg	0.085	0.050	0.076	0.050	<0.050	0.061	<0.050	0.050	7001291
High Molecular Weight PAH`s	mg/kg	0.90	0.050	0.87	0.12	<0.050	0.063	<0.050	0.050	7001291
Total PAH	mg/kg	0.99	0.050	0.95	0.12	<0.050	0.12	<0.050	0.050	7001291
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	91		97		100	91	100		7013758
D8-ACENAPHTHYLENE (sur.)	%	90		99		100	97	100		7013758
D8-NAPHTHALENE (sur.)	%	88		98		96	96	98		7013758
TERPHENYL-D14 (sur.)	%	90		96		100	88	100		7013758

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
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Your P.O. #: 700261278
Sampler Initials: AH

Package 1	7.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

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Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7001762	Moisture	2013/07/21					<0.30	%	4.7	20		
7001796	Moisture	2013/07/21					<0.30	%	8.4	20		
7005601	Total Antimony (Sb)	2013/07/21	91	75 - 125	98	75 - 125	<0.10	mg/kg			90	70 - 130
7005601	Total Arsenic (As)	2013/07/21	94	75 - 125	100	75 - 125	<0.50	mg/kg	6.8	30	94	70 - 130
7005601	Total Barium (Ba)	2013/07/21	NC	75 - 125	98	75 - 125	<0.10	mg/kg	17.9	35	100	70 - 130
7005601	Total Beryllium (Be)	2013/07/21	101	75 - 125	107	75 - 125	<0.40	mg/kg				
7005601	Total Cadmium (Cd)	2013/07/21	100	75 - 125	104	75 - 125	<0.050	mg/kg			109	70 - 130
7005601	Total Chromium (Cr)	2013/07/21	NC	75 - 125	100	75 - 125	<1.0	mg/kg	12.0	30	104	70 - 130
7005601	Total Cobalt (Co)	2013/07/21	97	75 - 125	101	75 - 125	<0.30	mg/kg			94	70 - 130
7005601	Total Copper (Cu)	2013/07/21	93	75 - 125	102	75 - 125	<0.50	mg/kg	3.5	30	87	70 - 130
7005601	Total Lead (Pb)	2013/07/21	99	75 - 125	104	75 - 125	<0.10	mg/kg	4.3	35	92	70 - 130
7005601	Total Lithium (Li)	2013/07/21	97	75 - 125	99	75 - 125	<5.0	mg/kg				
7005601	Total Manganese (Mn)	2013/07/21	NC	75 - 125	101	75 - 125	<0.20	mg/kg			97	70 - 130
7005601	Total Mercury (Hg)	2013/07/21	96	75 - 125	104	75 - 125	<0.050	mg/kg			87	70 - 130
7005601	Total Molybdenum (Mo)	2013/07/21	95	75 - 125	96	75 - 125	<0.10	mg/kg			99	70 - 130
7005601	Total Nickel (Ni)	2013/07/21	NC	75 - 125	99	75 - 125	<0.80	mg/kg			88	70 - 130
7005601	Total Selenium (Se)	2013/07/21	102	75 - 125	112	75 - 125	<0.50	mg/kg				
7005601	Total Silver (Ag)	2013/07/21	96	75 - 125	95	75 - 125	<0.050	mg/kg				
7005601	Total Strontium (Sr)	2013/07/21	NC	75 - 125	95	75 - 125	<0.10	mg/kg			94	70 - 130
7005601	Total Thallium (Tl)	2013/07/21	89	75 - 125	98	75 - 125	<0.050	mg/kg			82	70 - 130
7005601	Total Tin (Sn)	2013/07/21	91	75 - 125	94	75 - 125	<0.10	mg/kg				
7005601	Total Titanium (Ti)	2013/07/21	NC	75 - 125	95	75 - 125	<1.0	mg/kg			92	70 - 130
7005601	Total Uranium (U)	2013/07/21	97	75 - 125	99	75 - 125	<0.050	mg/kg			104	70 - 130
7005601	Total Vanadium (V)	2013/07/21	NC	75 - 125	98	75 - 125	<2.0	mg/kg			97	70 - 130
7005601	Total Zinc (Zn)	2013/07/21	NC	75 - 125	111	75 - 125	<1.0	mg/kg	2.7	30	97	70 - 130
7005601	Total Aluminum (Al)	2013/07/21					<100	mg/kg			98	70 - 130
7005601	Total Calcium (Ca)	2013/07/21					<100	mg/kg			92	70 - 130
7005601	Total Iron (Fe)	2013/07/21					<100	mg/kg			93	70 - 130
7005601	Total Magnesium (Mg)	2013/07/21					<100	mg/kg			89	70 - 130
7005601	Total Phosphorus (P)	2013/07/21					<10	mg/kg			84	70 - 130
7005601	Total Bismuth (Bi)	2013/07/21					<0.10	mg/kg				
7005601	Total Potassium (K)	2013/07/21					<100	mg/kg				
7005601	Total Sodium (Na)	2013/07/21					<100	mg/kg				
7005601	Total Zirconium (Zr)	2013/07/21					<0.50	mg/kg				
7005605	Soluble (2:1) pH	2013/07/21			100	97 - 103			2.4	20		
7005609	Saturation %	2013/07/20			105	80 - 120	<1.0	%	3.0	30		
7006216	Total Antimony (Sb)	2013/07/21	92	75 - 125	91	75 - 125	<0.10	mg/kg	NC	30	90	70 - 130
7006216	Total Arsenic (As)	2013/07/21	97	75 - 125	92	75 - 125	<0.50	mg/kg	NC	30	100	70 - 130
7006216	Total Barium (Ba)	2013/07/21	NC	75 - 125	93	75 - 125	<0.10	mg/kg	11.8	35	102	70 - 130

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Maxxam Job #: B361535
Report Date: 2013/07/25

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7006216	Total Beryllium (Be)	2013/07/21	105	75 - 125	96	75 - 125	<0.40	mg/kg	NC	30		
7006216	Total Cadmium (Cd)	2013/07/21	101	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	117	70 - 130
7006216	Total Chromium (Cr)	2013/07/21	104	75 - 125	100	75 - 125	<1.0	mg/kg	7.9	30	104	70 - 130
7006216	Total Cobalt (Co)	2013/07/21	98	75 - 125	103	75 - 125	<0.30	mg/kg	2.6	30	93	70 - 130
7006216	Total Copper (Cu)	2013/07/21	99	75 - 125	97	75 - 125	<0.50	mg/kg	5.1	30	89	70 - 130
7006216	Total Lead (Pb)	2013/07/21	100	75 - 125	102	75 - 125	<0.10	mg/kg	1.5	35	92	70 - 130
7006216	Total Lithium (Li)	2013/07/21	101	75 - 125	101	75 - 125	<5.0	mg/kg	NC	30		
7006216	Total Manganese (Mn)	2013/07/21	NC	75 - 125	105	75 - 125	<0.20	mg/kg	3.7	30	98	70 - 130
7006216	Total Mercury (Hg)	2013/07/21	105	75 - 125	95	75 - 125	<0.050	mg/kg	NC	35	107	70 - 130
7006216	Total Molybdenum (Mo)	2013/07/21	98	75 - 125	96	75 - 125	<0.10	mg/kg	NC	35	96	70 - 130
7006216	Total Nickel (Ni)	2013/07/21	101	75 - 125	94	75 - 125	<0.80	mg/kg	3.7	30	90	70 - 130
7006216	Total Selenium (Se)	2013/07/21	105	75 - 125	100	75 - 125	<0.50	mg/kg	NC	30		
7006216	Total Silver (Ag)	2013/07/21	102	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35		
7006216	Total Strontium (Sr)	2013/07/21	NC	75 - 125	101	75 - 125	0.10, RDL=0.10	mg/kg	26.9	35	94	70 - 130
7006216	Total Thallium (Tl)	2013/07/21	92	75 - 125	95	75 - 125	<0.050	mg/kg	NC	30	85	70 - 130
7006216	Total Tin (Sn)	2013/07/21	94	75 - 125	92	75 - 125	<0.10	mg/kg	NC	35		
7006216	Total Titanium (Ti)	2013/07/21	NC	75 - 125	98	75 - 125	<1.0	mg/kg	8.6	35	107	70 - 130
7006216	Total Uranium (U)	2013/07/21	97	75 - 125	96	75 - 125	<0.050	mg/kg	NC	30	110	70 - 130
7006216	Total Vanadium (V)	2013/07/21	NC	75 - 125	97	75 - 125	<2.0	mg/kg	0.3	30	98	70 - 130
7006216	Total Zinc (Zn)	2013/07/21	NC	75 - 125	102	75 - 125	<1.0	mg/kg	0.5	30	97	70 - 130
7006216	Total Aluminum (Al)	2013/07/21					<100	mg/kg	0.2	35	101	70 - 130
7006216	Total Calcium (Ca)	2013/07/21					<100	mg/kg	5.9	30	94	70 - 130
7006216	Total Iron (Fe)	2013/07/21					<100	mg/kg	1.4	30	95	70 - 130
7006216	Total Magnesium (Mg)	2013/07/21					<100	mg/kg	1	30	91	70 - 130
7006216	Total Phosphorus (P)	2013/07/21					<10	mg/kg	4.5	30	91	70 - 130
7006216	Total Bismuth (Bi)	2013/07/21					<0.10	mg/kg	NC	30		
7006216	Total Potassium (K)	2013/07/21					<100	mg/kg	0.3	35		
7006216	Total Sodium (Na)	2013/07/21					<100	mg/kg	3.9	35		
7006216	Total Zirconium (Zr)	2013/07/21					<0.50	mg/kg	6.7	30		
7006219	Soluble (2:1) pH	2013/07/22			101	97 - 103			0.2	20		
7006221	Total Antimony (Sb)	2013/07/22	95	75 - 125	96	75 - 125	<0.10	mg/kg	NC	30	100	70 - 130
7006221	Total Arsenic (As)	2013/07/22	98	75 - 125	97	75 - 125	<0.50	mg/kg	7.4	30	100	70 - 130
7006221	Total Barium (Ba)	2013/07/22	NC	75 - 125	98	75 - 125	<0.10	mg/kg	23.3	35	98	70 - 130
7006221	Total Beryllium (Be)	2013/07/22	107	75 - 125	106	75 - 125	<0.40	mg/kg	NC	30		
7006221	Total Cadmium (Cd)	2013/07/22	103	75 - 125	102	75 - 125	<0.050	mg/kg	NC	30	119	70 - 130
7006221	Total Chromium (Cr)	2013/07/22	105	75 - 125	97	75 - 125	<1.0	mg/kg	0.7	30	99	70 - 130
7006221	Total Cobalt (Co)	2013/07/22	102	75 - 125	101	75 - 125	<0.30	mg/kg	12.8	30	93	70 - 130
7006221	Total Copper (Cu)	2013/07/22	101	75 - 125	102	75 - 125	<0.50	mg/kg	3.7	30	88	70 - 130
7006221	Total Lead (Pb)	2013/07/22	102	75 - 125	100	75 - 125	<0.10	mg/kg	4.8	35	92	70 - 130

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SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: AH

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7006221	Total Lithium (Li)	2013/07/22	104	75 - 125	103	75 - 125	<5.0	mg/kg	NC	30		
7006221	Total Manganese (Mn)	2013/07/22	NC	75 - 125	100	75 - 125	<0.20	mg/kg	47.1(1)	30	95	70 - 130
7006221	Total Mercury (Hg)	2013/07/22	98	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35	87	70 - 130
7006221	Total Molybdenum (Mo)	2013/07/22	103	75 - 125	96	75 - 125	<0.10	mg/kg	NC	35	106	70 - 130
7006221	Total Nickel (Ni)	2013/07/22	100	75 - 125	100	75 - 125	<0.80	mg/kg	12.8	30	90	70 - 130
7006221	Total Selenium (Se)	2013/07/22	103	75 - 125	104	75 - 125	<0.50	mg/kg	NC	30		
7006221	Total Silver (Ag)	2013/07/22	99	75 - 125	97	75 - 125	<0.050	mg/kg	NC	35		
7006221	Total Strontium (Sr)	2013/07/22	100	75 - 125	97	75 - 125	<0.10	mg/kg	5.4	35	96	70 - 130
7006221	Total Thallium (Tl)	2013/07/22	99	75 - 125	93	75 - 125	<0.050	mg/kg	NC	30	84	70 - 130
7006221	Total Tin (Sn)	2013/07/22	95	75 - 125	92	75 - 125	<0.10	mg/kg	NC	35		
7006221	Total Titanium (Ti)	2013/07/22	NC	75 - 125	93	75 - 125	<1.0	mg/kg	1	35	102	70 - 130
7006221	Total Uranium (U)	2013/07/22	102	75 - 125	96	75 - 125	<0.050	mg/kg	13.6	30	111	70 - 130
7006221	Total Vanadium (V)	2013/07/22	102	75 - 125	96	75 - 125	<2.0	mg/kg	3.7	30	97	70 - 130
7006221	Total Zinc (Zn)	2013/07/22	NC	75 - 125	106	75 - 125	1.0, RDL=1.0	mg/kg	3.9	30	97	70 - 130
7006221	Total Aluminum (Al)	2013/07/22					<100	mg/kg	2.5	35	100	70 - 130
7006221	Total Calcium (Ca)	2013/07/22					<100	mg/kg	0.6	30	86	70 - 130
7006221	Total Iron (Fe)	2013/07/22					<100	mg/kg	13.6	30	85	70 - 130
7006221	Total Magnesium (Mg)	2013/07/22					<100	mg/kg	1.4	30	83	70 - 130
7006221	Total Phosphorus (P)	2013/07/22					<10	mg/kg	5.8	30	90	70 - 130
7006221	Total Bismuth (Bi)	2013/07/22					<0.10	mg/kg	NC	30		
7006221	Total Potassium (K)	2013/07/22					<100	mg/kg	2.2	35		
7006221	Total Sodium (Na)	2013/07/22					<100	mg/kg	NC	35		
7006221	Total Zirconium (Zr)	2013/07/22					<0.50	mg/kg	NC	30		
7006222	Soluble (2:1) pH	2013/07/22			100	97 - 103			0.1	20		
7007347	Wet Soluble Sodium (Na)	2013/07/22					<5.0	mg/L				
7009518	Soluble Chloride (Cl)	2013/07/22					<5.0	mg/L				
7013758	D10-ANTHRACENE (sur.)	2013/07/24	90	60 - 130	98	60 - 130	99	%				
7013758	D8-ACENAPHTHYLENE (sur.)	2013/07/24	94	50 - 130	99	50 - 130	99	%				
7013758	D8-NAPHTHALENE (sur.)	2013/07/24	92	50 - 130	99	50 - 130	99	%				
7013758	TERPHENYL-D14 (sur.)	2013/07/24	90	60 - 130	97	60 - 130	99	%				
7013758	Naphthalene	2013/07/24	79	50 - 130	90	50 - 130	<0.010	mg/kg	NC	50		
7013758	2-Methylnaphthalene	2013/07/24	97	50 - 130	112	50 - 130	<0.020	mg/kg	NC	50		
7013758	Acenaphthylene	2013/07/24	80	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
7013758	Acenaphthene	2013/07/24	83	50 - 130	94	50 - 130	<0.0050	mg/kg	NC	50		
7013758	Fluorene	2013/07/24	79	50 - 130	91	50 - 130	<0.020	mg/kg	NC	50		
7013758	Phenanthrene	2013/07/24	78	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7013758	Anthracene	2013/07/24	80	60 - 130	92	60 - 130	<0.0040	mg/kg	NC	50		
7013758	Fluoranthene	2013/07/24	74	60 - 130	88	60 - 130	<0.020	mg/kg	10.4	50		
7013758	Pyrene	2013/07/24	81	60 - 130	94	60 - 130	<0.020	mg/kg	7.6	50		

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Your P.O. #: 700261278
Sampler Initials: AH

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7013758	Benzo(a)anthracene	2013/07/24	69	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
7013758	Chrysene	2013/07/24	71	60 - 130	88	60 - 130	<0.020	mg/kg	10.2	50		
7013758	Benzo(b&j)fluoranthene	2013/07/24	71	60 - 130	93	60 - 130	<0.020	mg/kg	1.3	50		
7013758	Benzo(k)fluoranthene	2013/07/24	72	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
7013758	Benzo(a)pyrene	2013/07/24	74	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7013758	Indeno(1,2,3-cd)pyrene	2013/07/24	77	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
7013758	Dibenz(a,h)anthracene	2013/07/24	74	60 - 130	78	60 - 130	<0.050	mg/kg	NC	50		
7013758	Benzo(g,h,i)perylene	2013/07/24	75	60 - 130	87	60 - 130	<0.050	mg/kg	NC	50		
7013758	Benzo(b)fluoranthene	2013/07/24					<0.020	mg/kg	NC	N/A		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Validation Signature Page

Maxxam Job #: B361535

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26821 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700061278	B361535	
Address:	641-800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03833.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-0349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43	C#040051-03-01	Crystal Ireland
Email:	Bradley.Klaver@pwgsc-tpgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozey@slrconsulti	Sampled By:			

REGULATORY CRITERIA
- [ ] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other: _____

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Coliform/Fecals are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission): [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y/N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	GY4141	SP-01	13/07/17		SOIL		X	X									2	
2	GY4142	SP-02																
3	GY4143	SP-03																
4	GY4144	SP-04																
5	GY4145	SP-05																
6	GY4146	SP-06																
7	GY4147	SP-07																
8	GY4148	SP-08																
9	GY4149	SP-09																
10	GY4150	SP-10																

B361535

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[signature]	14/07/17	3:30	[signature] WEULBEE-PASQUAL	2017/07/18	07:50		[ ]	7,7,7	N/A [ ] Yes [ ] No

*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278	B361535	404951
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		C#40661-01-01	Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-8645	Phone:	(604)475-9595 Fax: (250)475-9599	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; okozley@slrconsulti	Sampled By:			

REGULATORY CRITERIA:
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT:
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. ☒

Job Specific Rush TAT (if applies to entire submission)
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required _____ ☐

Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Matrix Field Filtered ? (Y/N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	GY4151	SP-11	13/07/17		SOIL		X	X									2	
2	GY4152	SP-12	↓		↓		↓	↓									↓	
3	GY4153	CS-01	13/07/16		SOIL		X	X										
4	GY4154	CS-02																
5	GY4155	CS-03																
6	GY4156	CS-04																
7	GY4157	CS-05																
8	GY4158	CS-06	↓		↓		↓	↓									✓	
9																		
10																		

B361535

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal intact on Cooler?
Aaron Haegele	14/07/17		WILBERT PASCUA	2013/07/18	07:50		☐		☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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CHAIN OF CUSTODY RECORD

Page 1 of 2

INVOICE INFORMATION		REPORT INFORMATION (if differs from invoice)		PROJECT INFORMATION		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#20621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Xiaver	Contact Name:	Aaron Haegele	P.O. #:	700081278		
Address:	641-800 BURRARD STREET	Address:	8-40 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-8349 Fax: (604)775-6645	Phone:	(604)475-9095 Fax: (250)475-9086	Site #:	Colwood 43		
Email:	Bradley.Xiaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; dcopley@slrconsulting	Sampled by:			

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific)

YURNAROUND TIME (TAT) REQUIRED: PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: (will be applied if Rush TAT is not specified) (Standard TAT = 5 working days for most tests) (Please note: Standard TAT for certain tests such as BOD and Ammonia require longer times - please contact your Project Manager for details) ☒

Job Specific Rush TAT (if applies to entire submission): 1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: ☐

Rush Confirmation Number: (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Records Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Matrix Field Filtered (Y/N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME/BCSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1		SP-01	13/07/17		SOIL		X	X					X				2	
2		SP-02																
3		SP-03																
4		SP-04																
5		SP-05																
6		SP-06																
7		SP-07																
8		SP-08																
9		SP-09																
10		SP-10																

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive ☐	Temperature (°C) on Receipt	Custody Seal Intact: ☐ Yes ☐ No
[illegible]	14/07/17	3:30							

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION		REPORT INFORMATION (if differs from invoice)		PROJECT INFORMATION		Laboratory Use Only	
Company Name:	#1766 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#20021 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Hedgele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET	Address:	6-45 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-5545 Fax: (604)775-6645	Phone:	(604)475-9995 Fax: (250)475-9996	Site #:	Colwood 43		Crystal Roland
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	shaegele@slrconsulting.com; rbuckley@slrconsult	Sampled by:			

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other

SPECIAL INSTRUCTIONS:

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

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Job Specific Rush TAT (if applicable to entire submission): 1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____ ☐

Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (+ 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample Location/Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered (Y/N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BC/CSR BTEX/VPH by HS in Soil	CCME/BC/CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4) in Soil	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1		SP-11	13/07/17		Soil		X	X					X				2	
2		SP-12	↓		↓		↓	↓					X				↓	
3		CS-01	13/07/16		Soil		X	X									↓	
4		CS-02	↓		↓		↓	↓									↓	
5		CS-03	↓		↓		↓	↓									↓	
6		CS-04	↓		↓		↓	↓									↓	
7		CS-05	↓		↓		↓	↓									↓	
8		CS-06	↓		↓		↓	↓									↓	
9																		
10																		

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive ☐	Temperature (°C) on Receipt	Custody Seal intact on Receipt? ☐ Yes ☐ No
[illegible]	14/07/17								

IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Success Through Science®

Your P.O. #: 700261278
Your Project #: 205.03633.00000
Site#: Colwood 43
Site Location: COLWOOD 43
Your C.O.C. #: 40495112, 40495104, 40495105, 40495108, 40495107

Attention: Aaron Haegele
SLR CONSULTING (CANADA) LTD
6-40 CADILLAC AVENUE
VICTORIA, BC
CANADA V8Z 1T2

Report Date: 2013/07/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B362197
Received: 2013/07/20, 09:10

Sample Matrix: Soil
Samples Received: 45

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2013/07/22	2013/07/23	BBY8-SOP-00010	EPA SW846 8260C
Chloride (soluble)	28	2013/07/24	2013/07/24	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	4	2013/07/25	2013/07/25	BBY6SOP-00011	SM-4500-Cl-
Soluble Chloride Ion	28	N/A	2013/07/25	BBY WI-00033	Calculated Parameter
Soluble Chloride Ion	4	N/A	2013/07/26	BBY WI-00033	Calculated Parameter
Flash Point in Solid by SetaFlash	2	2013/07/26	2013/07/26	BBY6SOP-00042	ASTM D3828-07a
Elements by ICPMS (total)	43	2013/07/23	2013/07/23	BBY7SOP-00004	BCMOE-SALM
Metals - TCLP	2	2013/07/23	2013/07/24	BBY7SOP-00001	EPA 6020A
Moisture	25	N/A	2013/07/23	BBY8SOP-00017	Ont MOE -E 3139
Moisture	20	N/A	2013/07/24	BBY8SOP-00017	Ont MOE -E 3139
Soluble Sodium Ion	16	N/A	2013/07/24	BBY WI-00033	Calculated Parameter
Soluble Sodium Ion	16	N/A	2013/07/25	BBY WI-00033	Calculated Parameter
PAH in Soil by GC/MS (SIM) - CCME	3	2013/07/22	2013/07/24	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	20	2013/07/22	2013/07/25	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/07/23	2013/07/24	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	17	2013/07/23	2013/07/25	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	24	N/A	2013/07/25	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	19	N/A	2013/07/26	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	24	N/A	2013/07/25	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	19	N/A	2013/07/26	BBY WI-00033	BC MOE Lab Method
Free Liquid (Paint filter)	2	N/A	2013/07/26	BBY6SOP-00043	EPA SW846/9095B
pH (2:1 DI Water Extract)	45	2013/07/23	2013/07/23	BBY6SOP-00028	Carter, SSMA 16.2
TCLP pH Measurements	2	N/A	2013/07/24	BBY7SOP-00005	EPA 1311
Saturated Paste	32	2013/07/24	2013/07/24	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Cations (Ca,K,Mg,Na,S)	16	N/A	2013/07/24	BBY7SOP-00018	Carter Method 5.2
Soluble Cations (Ca,K,Mg,Na,S)	16	N/A	2013/07/25	BBY7SOP-00018	Carter Method 5.2
Volatile HC-BTEX	2	N/A	2013/07/24	BBY WI-00033	BC MOE Lab Method

* Results relate only to the items tested.

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Crystal Ireland, B.Sc., Account Specialist
Email: CIreland@maxxam.ca
Phone# (604) 638-5016

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		GY9296		GY9297		
Sampling Date		2013/07/17		2013/07/17		
	UNITS	**SP-13**	**QC Batch**	**SP-14**	**RDL**	**QC Batch**
Physical Properties						
Soluble (2:1) pH	pH Units	12.5	7010976	11.6	0.010	7011240
Physical Properties						
Free Liquid	N/A	PASS	7025147	PASS	N/A	7025147

PHYSICAL TESTING (SOIL)

Maxxam ID		GY9296	GY9297		GY9298	GY9299		GY9300		GY9301	GY9302		
Sampling Date		2013/07/17	2013/07/17		2013/07/17	2013/07/17		2013/07/17		2013/07/17	2013/07/17		
	UNITS	**SP-13**	**SP-14**	**QC Batch**	**SP-15**	**SP-16**	**QC Batch**	**SP-17**	**QC Batch**	**SP-18**	**SP-19**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	28	25	7012051	30	15	7010072	26	7010254	29	21	0.30	7010072

Maxxam ID		GY9303	GY9304	GY9305		GY9306		GY9307	GY9308	GY9309	GY9310		
Sampling Date		2013/07/17	2013/07/17	2013/07/17		2013/07/18		2013/07/18	2013/07/18	2013/07/18	2013/07/18		
	UNITS	**SP-20**	**SP-21**	**SP-22**	**QC Batch**	**SP-23**	**QC Batch**	**SP-24**	**SP-25**	**SP-26**	**SP-27**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	20	25	29	7010254	29	7010072	18	16	16	13	0.30	7010254

Maxxam ID		GY9311	GY9312	GY9313	GY9314	GY9315	GY9316		GY9317		GY9318		
Sampling Date		2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18		2013/07/18		2013/07/18		
	UNITS	**SP-28**	**SP-29**	**SP-30**	**SP-31**	**SP-32**	**SP-33**	**QC Batch**	**SP-34**	**QC Batch**	**SP-35**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	20	12	31	25	22	23	7010254	20	7010072	14	0.30	7010254

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

PHYSICAL TESTING (SOIL)

Maxxam ID		GY9319	GY9320	GY9321		GY9322	GY9323	GY9324	GY9325	GY9328		
Sampling Date		2013/07/18	2013/07/18	2013/07/19		2013/07/19	2013/07/19	2013/07/19	2013/07/19	2013/07/19		
	UNITS	**SP-36**	**SP-37**	**SP-38**	**QC Batch**	**SP-39**	**SP-40**	**SP-41**	**SP-42**	**SP-43**	**RDL**	**QC Batch**
Physical Properties												
Moisture	%	17	14	13	7010254	14	14	20	17	21	0.30	7010072

Maxxam ID		GY9329	GY9330		GY9331		GY9332		GY9333	GY9334	GY9335		
Sampling Date		2013/07/19	2013/07/19		2013/07/19		2013/07/17		2013/07/17	2013/07/17	2013/07/17		
	UNITS	**SP-44**	**SP-45**	**QC Batch**	**SP-46**	**QC Batch**	**CS-07**	**QC Batch**	**CS-08**	**CS-09**	**CS-10**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	16	25	7010254	28	7010072	56	7008238	41	29	21	0.30	7010072

Maxxam ID		GY9336	GY9342	GY9343		GY9344	GY9345		GY9346	GY9347		
Sampling Date		2013/07/17	2013/07/17	2013/07/17		2013/07/17	2013/07/17		2013/07/17	2013/07/17		
	UNITS	**CS-11**	**CS-12**	**CS-13**	**QC Batch**	**CS-14**	**CS-15**	**QC Batch**	**CS-16**	**CS-17**	**RDL**	**QC Batch**
Physical Properties												
Moisture	%	18	9.3	16	7010072	12	49	7008238	43	29	0.30	7010072

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		GY9296	GY9297		
Sampling Date		2013/07/17	2013/07/17		
	UNITS	**SP-13**	**SP-14**	**RDL**	**QC Batch**
TCLP Extraction Procedure					
Initial pH of Sample	pH Units	12.6	12.1	N/A	7013169
pH after HCl	pH Units	6.39	6.64	N/A	7013169
Final pH of Leachate	pH Units	7.00	7.22	N/A	7013169
pH of Leaching Fluid	pH Units	2.85	2.85	N/A	7013169

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

MISCELLANEOUS (SOIL)

Maxxam ID		GY9296	GY9297		
Sampling Date		2013/07/17	2013/07/17		
	UNITS	**SP-13**	**SP-14**	**RDL**	**QC Batch**
Physical Properties					
Flash point	°C	>75	>75	23	7025146

BCCSR BTEX/VPH BY HS IN SOIL (SOIL)

Maxxam ID		GY9296	GY9297		
Sampling Date		2013/07/17	2013/07/17		
	UNITS	**SP-13**	**SP-14**	**RDL**	**QC Batch**
Volatiles					
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	10	7007725
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	<0.10	0.10	7013404
Benzene	mg/kg	<0.0050	<0.0050	0.0050	7013404
Toluene	mg/kg	<0.020	<0.020	0.020	7013404
Ethylbenzene	mg/kg	<0.010	<0.010	0.010	7013404
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	7013404
o-Xylene	mg/kg	<0.040	<0.040	0.040	7013404
Styrene	mg/kg	<0.030	<0.030	0.030	7013404
Xylenes (Total)	mg/kg	<0.040	<0.040	0.040	7013404
VH C6-C10	mg/kg	<10	<10	10	7013404
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	91	104		7013404
4-BROMOFLUOROBENZENE (sur.)	%	102	102		7013404
D10-ETHYLBENZENE (sur.)	%	95	93		7013404
D4-1,2-DICHLOROETHANE (sur.)	%	104	111		7013404

RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
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CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9298	GY9299		GY9300		GY9301	GY9302	GY9303	GY9304		
Sampling Date		2013/07/17	2013/07/17		2013/07/17		2013/07/17	2013/07/17	2013/07/17	2013/07/17		
	UNITS	**SP-15**	**SP-16**	**QC Batch**	**SP-17**	**QC Batch**	**SP-18**	**SP-19**	**SP-20**	**SP-21**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.25	10.7	7011110	11.0	7011240	10.9	11.3	11.0	10.1	0.010	7011110
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	4260	10100	7011062	4600	7011191	6150	10700	8510	7200	100	7011062
Total Antimony (Sb)	mg/kg	0.19	0.46	7011062	0.22	7011191	0.21	4.47	0.98	1.29	0.10	7011062
Total Arsenic (As)	mg/kg	<0.50	1.78	7011062	<0.50	7011191	1.00	13.5	2.95	2.53	0.50	7011062
Total Barium (Ba)	mg/kg	61.1	56.3	7011062	40.6	7011191	52.9	67.8	62.6	47.1	0.10	7011062
Total Beryllium (Be)	mg/kg	<0.40	<0.40	7011062	<0.40	7011191	<0.40	<0.40	<0.40	<0.40	0.40	7011062
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	7011062	<0.10	7011191	<0.10	<0.10	<0.10	<0.10	0.10	7011062
Total Cadmium (Cd)	mg/kg	0.119	0.153	7011062	0.134	7011191	0.142	0.251	0.143	0.135	0.050	7011062
Total Calcium (Ca)	mg/kg	246000	147000	7011062	151000	7011191	189000	149000	176000	186000	100	7011062
Total Chromium (Cr)	mg/kg	6.0	15.2	7011062	9.7	7011191	9.7	19.2	13.5	11.5	1.0	7011062
Total Cobalt (Co)	mg/kg	2.02	7.20	7011062	3.36	7011191	3.98	10.5	6.53	5.33	0.30	7011062
Total Copper (Cu)	mg/kg	10.7	53.3	7011062	32.9	7011191	16.0	172	51.3	24.4	0.50	7011062
Total Iron (Fe)	mg/kg	5070	14900	7011062	8050	7011191	8040	22200	12300	9800	100	7011062
Total Lead (Pb)	mg/kg	30.3	30.1	7011062	23.4	7011191	32.8	33.7	35.4	31.6	0.10	7011062
Total Lithium (Li)	mg/kg	<5.0	5.4	7011062	<5.0	7011191	<5.0	5.5	<5.0	<5.0	5.0	7011062
Total Magnesium (Mg)	mg/kg	13000	8750	7011062	9850	7011191	16600	12700	15000	15400	100	7011062
Total Manganese (Mn)	mg/kg	225	386	7011062	190	7011191	229	384	313	268	0.20	7011062
Total Mercury (Hg)	mg/kg	0.161	<0.050	7011062	<0.050	7011191	<0.050	<0.050	<0.050	0.117	0.050	7011062
Total Molybdenum (Mo)	mg/kg	0.27	0.61	7011062	0.37	7011191	0.48	1.59	0.77	0.52	0.10	7011062
Total Nickel (Ni)	mg/kg	2.88	11.2	7011062	5.82	7011191	6.53	13.9	9.49	8.21	0.80	7011062
Total Phosphorus (P)	mg/kg	272	422	7011062	245	7011191	301	493	381	343	10	7011062
Total Potassium (K)	mg/kg	216	364	7011062	163	7011191	291	461	293	202	100	7011062
Total Selenium (Se)	mg/kg	<0.50	<0.50	7011062	<0.50	7011191	<0.50	<0.50	<0.50	<0.50	0.50	7011062
Total Silver (Ag)	mg/kg	<0.050	0.053	7011062	<0.050	7011191	<0.050	0.094	0.051	<0.050	0.050	7011062
Total Sodium (Na)	mg/kg	489	285	7011062	284	7011191	457	426	401	321	100	7011062
Total Strontium (Sr)	mg/kg	1150	526	7011062	471	7011191	771	564	736	732	0.10	7011062
Total Thallium (Tl)	mg/kg	<0.050	<0.050	7011062	<0.050	7011191	<0.050	<0.050	<0.050	<0.050	0.050	7011062
Total Tin (Sn)	mg/kg	0.72	4.37	7011062	1.06	7011191	1.14	2.01	1.87	1.18	0.10	7011062
Total Titanium (Ti)	mg/kg	225	635	7011062	299	7011191	329	610	529	465	1.0	7011062
Total Uranium (U)	mg/kg	1.64	0.906	7011062	0.968	7011191	1.62	1.23	1.56	1.36	0.050	7011062
Total Vanadium (V)	mg/kg	16.7	38.7	7011062	19.8	7011191	24.4	39.4	32.6	28.2	2.0	7011062
Total Zinc (Zn)	mg/kg	86.9	82.2	7011062	32.1	7011191	29.5	297	101	33.9	1.0	7011062
Total Zirconium (Zr)	mg/kg	1.98	2.06	7011062	1.29	7011191	1.87	2.59	2.20	1.93	0.50	7011062

RDL = Reportable Detection Limit

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
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Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9305		GY9306	GY9307		GY9308	GY9309		GY9310		
Sampling Date		2013/07/17		2013/07/18	2013/07/18		2013/07/18	2013/07/18		2013/07/18		
	UNITS	**SP-22**	**QC Batch**	**SP-23**	**SP-24**	**QC Batch**	**SP-25**	**SP-26**	**QC Batch**	**SP-27**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	12.0	7011240	10.5	10.6	7011110	10.9	10.7(1)	7011240	10.9	0.010	7011110
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	4620	7011191	5800	8720	7011062	8970	12900	7011191	8250	100	7011062
Total Antimony (Sb)	mg/kg	0.27	7011191	0.36	0.46	7011062	0.48	0.71	7011191	0.54	0.10	7011062
Total Arsenic (As)	mg/kg	0.72	7011191	1.78	1.68	7011062	1.33	3.55	7011191	2.20	0.50	7011062
Total Barium (Ba)	mg/kg	36.1	7011191	49.1	53.0	7011062	51.9	69.8	7011191	85.8	0.10	7011062
Total Beryllium (Be)	mg/kg	<0.40	7011191	<0.40	<0.40	7011062	<0.40	<0.40	7011191	<0.40	0.40	7011062
Total Bismuth (Bi)	mg/kg	<0.10	7011191	<0.10	<0.10	7011062	<0.10	<0.10	7011191	<0.10	0.10	7011062
Total Cadmium (Cd)	mg/kg	0.103	7011191	0.178	0.161	7011062	0.167	0.235	7011191	0.198	0.050	7011062
Total Calcium (Ca)	mg/kg	142000	7011191	166000	132000	7011062	169000	113000	7011191	170000	100	7011062
Total Chromium (Cr)	mg/kg	6.6	7011191	8.5	12.0	7011062	13.5	19.7	7011191	13.6	1.0	7011062
Total Cobalt (Co)	mg/kg	2.79	7011191	3.25	5.21	7011062	5.75	8.02	7011191	4.97	0.30	7011062
Total Copper (Cu)	mg/kg	12.9	7011191	15.9	25.0	7011062	25.8	43.3	7011191	24.3	0.50	7011062
Total Iron (Fe)	mg/kg	6490	7011191	6890	10600	7011062	11000	16600	7011191	10400	100	7011062
Total Lead (Pb)	mg/kg	20.8	7011191	18.9	15.6	7011062	19.2	42.3	7011191	28.6	0.10	7011062
Total Lithium (Li)	mg/kg	<5.0	7011191	<5.0	<5.0	7011062	<5.0	6.5	7011191	<5.0	5.0	7011062
Total Magnesium (Mg)	mg/kg	12700	7011191	27200	17800	7011062	18600	12100	7011191	14000	100	7011062
Total Manganese (Mn)	mg/kg	182	7011191	307	327	7011062	358	453	7011191	418	0.20	7011062
Total Mercury (Hg)	mg/kg	<0.050	7011191	<0.050	<0.050	7011062	<0.050	<0.050	7011191	<0.050	0.050	7011062
Total Molybdenum (Mo)	mg/kg	0.29	7011191	0.67	0.60	7011062	0.61	0.73	7011191	0.74	0.10	7011062
Total Nickel (Ni)	mg/kg	4.76	7011191	6.24	10.1	7011062	10.2	15.6	7011191	9.30	0.80	7011062
Total Phosphorus (P)	mg/kg	213	7011191	342	442	7011062	430	559	7011191	512	10	7011062
Total Potassium (K)	mg/kg	181	7011191	327	594	7011062	355	468	7011191	375	100	7011062
Total Selenium (Se)	mg/kg	<0.50	7011191	<0.50	<0.50	7011062	<0.50	<0.50	7011191	<0.50	0.50	7011062
Total Silver (Ag)	mg/kg	<0.050	7011191	<0.050	<0.050	7011062	<0.050	0.057	7011191	<0.050	0.050	7011062
Total Sodium (Na)	mg/kg	314	7011191	1530	864	7011062	730	427	7011191	538	100	7011062
Total Strontium (Sr)	mg/kg	573	7011191	625	415	7011062	445	295	7011191	476	0.10	7011062
Total Thallium (Tl)	mg/kg	<0.050	7011191	<0.050	<0.050	7011062	<0.050	<0.050	7011191	<0.050	0.050	7011062
Total Tin (Sn)	mg/kg	1.66	7011191	0.90	1.30	7011062	2.27	1.64	7011191	2.16	0.10	7011062
Total Titanium (Ti)	mg/kg	294	7011191	337	491	7011062	527	808	7011191	437	1.0	7011062
Total Uranium (U)	mg/kg	1.10	7011191	1.84	1.66	7011062	1.27	1.11	7011191	1.63	0.050	7011062
Total Vanadium (V)	mg/kg	18.3	7011191	22.3	31.7	7011062	34.4	49.5	7011191	30.3	2.0	7011062
Total Zinc (Zn)	mg/kg	18.9	7011191	25.4	38.3	7011062	32.1	82.2	7011191	68.5	1.0	7011062
Total Zirconium (Zr)	mg/kg	1.54	7011191	1.86	2.04	7011062	1.96	2.45	7011191	1.55	0.50	7011062

RDL = Reportable Detection Limit
(1) - Due to insufficient sample water:soil extration ratio has changed from 2:1 to 5:1 in order to analyse sample.

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Maxxam Job #: B362197
Report Date: 2013/07/26

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Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9311		GY9312		GY9313		GY9314		GY9315	GY9316		
Sampling Date		2013/07/18		2013/07/18		2013/07/18		2013/07/18		2013/07/18	2013/07/18		
	UNITS	**SP-28**	**QC Batch**	**SP-29**	**QC Batch**	**SP-30**	**QC Batch**	**SP-31**	**QC Batch**	**SP-32**	**SP-33**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	11.0	7011240	10.6	7011110	12.2	7011240	11.5	7011110	11.3	11.0	0.010	7011240
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	9930	7011191	15500	7011062	7580	7011191	7620	7011062	9050	8640	100	7011191
Total Antimony (Sb)	mg/kg	0.57	7011191	0.63	7011062	0.57	7011191	0.40	7011062	0.68	0.61	0.10	7011191
Total Arsenic (As)	mg/kg	2.41	7011191	3.13	7011062	2.23	7011191	1.80	7011062	4.15	3.10	0.50	7011191
Total Barium (Ba)	mg/kg	78.8	7011191	66.5	7011062	47.8	7011191	65.6	7011062	108	80.7	0.10	7011191
Total Beryllium (Be)	mg/kg	<0.40	7011191	<0.40	7011062	<0.40	7011191	<0.40	7011062	<0.40	<0.40	0.40	7011191
Total Bismuth (Bi)	mg/kg	<0.10	7011191	<0.10	7011062	<0.10	7011191	<0.10	7011062	<0.10	<0.10	0.10	7011191
Total Cadmium (Cd)	mg/kg	0.225	7011191	0.247	7011062	0.181	7011191	0.188	7011062	0.205	0.167	0.050	7011191
Total Calcium (Ca)	mg/kg	178000	7011191	53700	7011062	181000	7011191	195000	7011062	172000	151000	100	7011191
Total Chromium (Cr)	mg/kg	16.7	7011191	25.1	7011062	11.3	7011191	11.4	7011062	15.4	12.7	1.0	7011191
Total Cobalt (Co)	mg/kg	6.33	7011191	11.6	7011062	4.09	7011191	4.08	7011062	5.31	5.14	0.30	7011191
Total Copper (Cu)	mg/kg	32.4	7011191	67.4	7011062	20.8	7011191	24.1	7011062	31.7	26.6	0.50	7011191
Total Iron (Fe)	mg/kg	13100	7011191	21600	7011062	8820	7011191	9260	7011062	15600	13300	100	7011191
Total Lead (Pb)	mg/kg	32.3	7011191	17.9	7011062	19.2	7011191	33.5	7011062	72.8	25.6	0.10	7011191
Total Lithium (Li)	mg/kg	<5.0	7011191	8.3	7011062	<5.0	7011191	<5.0	7011062	5.9	5.5	5.0	7011191
Total Magnesium (Mg)	mg/kg	15700	7011191	9320	7011062	25000	7011191	21900	7011062	12800	17900	100	7011191
Total Manganese (Mn)	mg/kg	428	7011191	474	7011062	324	7011191	356	7011062	415	413	0.20	7011191
Total Mercury (Hg)	mg/kg	<0.050	7011191	<0.050	7011062	<0.050	7011191	<0.050	7011062	0.128	<0.050	0.050	7011191
Total Molybdenum (Mo)	mg/kg	0.90	7011191	0.84	7011062	1.69	7011191	1.09	7011062	0.92	0.68	0.10	7011191
Total Nickel (Ni)	mg/kg	11.7	7011191	20.5	7011062	8.56	7011191	8.43	7011062	10.5	10.5	0.80	7011191
Total Phosphorus (P)	mg/kg	484	7011191	555	7011062	321	7011191	399	7011062	448	532	10	7011191
Total Potassium (K)	mg/kg	376	7011191	471	7011062	402	7011191	310	7011062	437	487	100	7011191
Total Selenium (Se)	mg/kg	<0.50	7011191	<0.50	7011062	<0.50	7011191	<0.50	7011062	<0.50	<0.50	0.50	7011191
Total Silver (Ag)	mg/kg	0.056	7011191	0.074	7011062	<0.050	7011191	<0.050	7011062	0.066	0.051	0.050	7011191
Total Sodium (Na)	mg/kg	570	7011191	350	7011062	581	7011191	475	7011062	708	920	100	7011191
Total Strontium (Sr)	mg/kg	481	7011191	155	7011062	423	7011191	497	7011062	471	482	0.10	7011191
Total Thallium (Tl)	mg/kg	<0.050	7011191	<0.050	7011062	<0.050	7011191	<0.050	7011062	<0.050	<0.050	0.050	7011191
Total Tin (Sn)	mg/kg	2.13	7011191	2.67	7011062	0.74	7011191	1.38	7011062	2.54	1.51	0.10	7011191
Total Titanium (Ti)	mg/kg	644	7011191	922	7011062	474	7011191	401	7011062	507	553	1.0	7011191
Total Uranium (U)	mg/kg	1.49	7011191	0.586	7011062	2.46	7011191	1.90	7011062	1.22	1.40	0.050	7011191
Total Vanadium (V)	mg/kg	37.3	7011191	63.2	7011062	28.6	7011191	27.6	7011062	32.3	33.8	2.0	7011191
Total Zinc (Zn)	mg/kg	65.5	7011191	163	7011062	50.5	7011191	48.9	7011062	83.1	38.7	1.0	7011191
Total Zirconium (Zr)	mg/kg	2.46	7011191	2.59	7011062	2.07	7011191	2.17	7011062	1.87	2.42	0.50	7011191

RDL = Reportable Detection Limit

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9317		GY9318		GY9319	GY9320		GY9321		GY9322		
Sampling Date		2013/07/18		2013/07/18		2013/07/18	2013/07/18		2013/07/19		2013/07/19		
	UNITS	**SP-34**	**QC Batch**	**SP-35**	**QC Batch**	**SP-36**	**SP-37**	**QC Batch**	**SP-38**	**QC Batch**	**SP-39**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	10.2	7011110	10.6	7011240	8.93	10.6	7011110	9.35	7011240	7.67	0.010	7011110
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	7540	7011062	17700	7011191	17400	18500	7011062	17900	7011191	22400	100	7011062
Total Antimony (Sb)	mg/kg	0.33	7011062	0.89	7011191	11.0	9.19	7011062	7.46	7011191	3.47	0.10	7011062
Total Arsenic (As)	mg/kg	1.38	7011062	4.71	7011191	23.4	15.6	7011062	12.1	7011191	9.42	0.50	7011062
Total Barium (Ba)	mg/kg	115	7011062	111	7011191	166	129	7011062	80.6	7011191	166	0.10	7011062
Total Beryllium (Be)	mg/kg	<0.40	7011062	<0.40	7011191	<0.40	<0.40	7011062	<0.40	7011191	0.42	0.40	7011062
Total Bismuth (Bi)	mg/kg	<0.10	7011062	<0.10	7011191	<0.10	<0.10	7011062	<0.10	7011191	<0.10	0.10	7011062
Total Cadmium (Cd)	mg/kg	0.160	7011062	0.273	7011191	0.345	0.395	7011062	0.251	7011191	0.541	0.050	7011062
Total Calcium (Ca)	mg/kg	197000	7011062	74800	7011191	89400	81500	7011062	66800	7011191	51000	100	7011062
Total Chromium (Cr)	mg/kg	9.5	7011062	31.9	7011191	27.9	31.3	7011062	28.4	7011191	35.2	1.0	7011062
Total Cobalt (Co)	mg/kg	3.45	7011062	12.6	7011191	14.6	16.3	7011062	12.1	7011191	25.6	0.30	7011062
Total Copper (Cu)	mg/kg	18.3	7011062	95.3	7011191	182	210	7011062	97.9	7011191	525	0.50	7011062
Total Iron (Fe)	mg/kg	7370	7011062	26100	7011191	30500	31400	7011062	24000	7011191	49000	100	7011062
Total Lead (Pb)	mg/kg	31.9	7011062	48.7	7011191	60.3	67.9	7011062	26.9	7011191	41.1	0.10	7011062
Total Lithium (Li)	mg/kg	<5.0	7011062	9.8	7011191	10.3	10.2	7011062	9.2	7011191	15.2	5.0	7011062
Total Magnesium (Mg)	mg/kg	32100	7011062	8850	7011191	8850	11700	7011062	11200	7011191	10300	100	7011062
Total Manganese (Mn)	mg/kg	410	7011062	524	7011191	551	566	7011062	482	7011191	606	0.20	7011062
Total Mercury (Hg)	mg/kg	<0.050	7011062	0.104	7011191	0.072	0.097	7011062	<0.050	7011191	0.080	0.050	7011062
Total Molybdenum (Mo)	mg/kg	1.04	7011062	1.08	7011191	3.02	2.93	7011062	1.19	7011191	5.50	0.10	7011062
Total Nickel (Ni)	mg/kg	7.04	7011062	23.8	7011191	21.1	22.6	7011062	21.9	7011191	24.0	0.80	7011062
Total Phosphorus (P)	mg/kg	631	7011062	519	7011191	640	589	7011062	596	7011191	465	10	7011062
Total Potassium (K)	mg/kg	590	7011062	581	7011191	710	737	7011062	580	7011191	1190	100	7011062
Total Selenium (Se)	mg/kg	<0.50	7011062	<0.50	7011191	<0.50	<0.50	7011062	<0.50	7011191	<0.50	0.50	7011062
Total Silver (Ag)	mg/kg	<0.050	7011062	0.085	7011191	0.138	0.160	7011062	0.087	7011191	0.278	0.050	7011062
Total Sodium (Na)	mg/kg	954	7011062	532	7011191	685	1040	7011062	484	7011191	1460	100	7011062
Total Strontium (Sr)	mg/kg	618	7011062	251	7011191	311	309	7011062	239	7011191	175	0.10	7011062
Total Thallium (Tl)	mg/kg	<0.050	7011062	<0.050	7011191	<0.050	<0.050	7011062	<0.050	7011191	0.058	0.050	7011062
Total Tin (Sn)	mg/kg	0.84	7011062	11.4	7011191	4.56	2.77	7011062	3.02	7011191	1.57	0.10	7011062
Total Titanium (Ti)	mg/kg	420	7011062	934	7011191	847	935	7011062	1010	7011191	921	1.0	7011062
Total Uranium (U)	mg/kg	1.96	7011062	0.643	7011191	0.867	0.833	7011062	0.742	7011191	0.791	0.050	7011062
Total Vanadium (V)	mg/kg	25.0	7011062	64.5	7011191	59.8	64.3	7011062	62.8	7011191	75.1	2.0	7011062
Total Zinc (Zn)	mg/kg	37.4	7011062	179	7011191	495	727	7011062	215	7011191	1550	1.0	7011062
Total Zirconium (Zr)	mg/kg	2.62	7011062	3.62	7011191	3.10	4.20	7011062	3.19	7011191	6.97	0.50	7011062

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9323		GY9324		GY9325		GY9328		GY9329	GY9330		
Sampling Date		2013/07/19		2013/07/19		2013/07/19		2013/07/19		2013/07/19	2013/07/19		
	UNITS	**SP-40**	**QC Batch**	**SP-41**	**QC Batch**	**SP-42**	**QC Batch**	**SP-43**	**QC Batch**	**SP-44**	**SP-45**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.75	7011110	8.06	7011240	8.59	7011110	9.20	7010976	9.04	8.64	0.010	7011110
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	17400	7011062	23000	7011191	20500	7011062	11700	7010973	13100	10500	100	7011062
Total Antimony (Sb)	mg/kg	14.1	7011062	11.4	7011191	13.9	7011062	1.63	7010973	0.91	0.48	0.10	7011062
Total Arsenic (As)	mg/kg	26.0	7011062	23.9	7011191	21.7	7011062	4.33	7010973	3.34	4.28	0.50	7011062
Total Barium (Ba)	mg/kg	93.9	7011062	131	7011191	85.2	7011062	115	7010973	70.7	61.7	0.10	7011062
Total Beryllium (Be)	mg/kg	<0.40	7011062	0.43	7011191	<0.40	7011062	<0.40	7010973	<0.40	<0.40	0.40	7011062
Total Bismuth (Bi)	mg/kg	<0.10	7011062	<0.10	7011191	<0.10	7011062	<0.10	7010973	<0.10	<0.10	0.10	7011062
Total Cadmium (Cd)	mg/kg	0.306	7011062	0.443	7011191	0.301	7011062	0.250	7010973	0.190	0.236	0.050	7011062
Total Calcium (Ca)	mg/kg	59600	7011062	72400	7011191	49100	7011062	168000	7010973	91500	154000	100	7011062
Total Chromium (Cr)	mg/kg	28.5	7011062	35.5	7011191	32.3	7011062	15.6	7010973	21.7	17.7	1.0	7011062
Total Cobalt (Co)	mg/kg	11.9	7011062	18.3	7011191	12.3	7011062	6.91	7010973	8.99	5.79	0.30	7011062
Total Copper (Cu)	mg/kg	118	7011062	229	7011191	94.9	7011062	43.5	7010973	40.0	25.7	0.50	7011062
Total Iron (Fe)	mg/kg	23000	7011062	34200	7011191	26000	7011062	16800	7010973	18600	18000	100	7011062
Total Lead (Pb)	mg/kg	34.2	7011062	61.9	7011191	37.3	7011062	54.2	7010973	32.6	81.5	0.10	7011062
Total Lithium (Li)	mg/kg	9.6	7011062	14.1	7011191	12.2	7011062	6.3	7010973	8.0	8.3	5.0	7011062
Total Magnesium (Mg)	mg/kg	9520	7011062	9730	7011191	11100	7011062	24200	7010973	21800	16700	100	7011062
Total Manganese (Mn)	mg/kg	488	7011062	549	7011191	468	7011062	450	7010973	419	353	0.20	7011062
Total Mercury (Hg)	mg/kg	<0.050	7011062	0.057	7011191	<0.050	7011062	0.061	7010973	<0.050	0.153	0.050	7011062
Total Molybdenum (Mo)	mg/kg	1.53	7011062	3.86	7011191	2.16	7011062	0.87	7010973	0.72	1.09	0.10	7011062
Total Nickel (Ni)	mg/kg	21.2	7011062	26.2	7011191	23.7	7011062	12.6	7010973	16.2	13.6	0.80	7011062
Total Phosphorus (P)	mg/kg	604	7011062	639	7011191	460	7011062	601	7010973	529	425	10	7011062
Total Potassium (K)	mg/kg	604	7011062	1010	7011191	639	7011062	578	7010973	571	786	100	7011062
Total Selenium (Se)	mg/kg	<0.50	7011062	<0.50	7011191	<0.50	7011062	<0.50	7010973	<0.50	<0.50	0.50	7011062
Total Silver (Ag)	mg/kg	0.116	7011062	0.160	7011191	0.119	7011062	0.058	7010973	0.072	0.058	0.050	7011062
Total Sodium (Na)	mg/kg	451	7011062	1230	7011191	825	7011062	2230	7010973	1640	5540	100	7011062
Total Strontium (Sr)	mg/kg	233	7011062	247	7011191	194	7011062	673	7010973	427	769	0.10	7011062
Total Thallium (Tl)	mg/kg	<0.050	7011062	0.055	7011191	0.054	7011062	<0.050	7010973	<0.050	<0.050	0.050	7011062
Total Tin (Sn)	mg/kg	3.40	7011062	3.37	7011191	3.09	7011062	9.79	7010973	2.44	1.63	0.10	7011062
Total Titanium (Ti)	mg/kg	891	7011062	1040	7011191	893	7011062	640	7010973	856	523	1.0	7011062
Total Uranium (U)	mg/kg	0.729	7011062	0.848	7011191	0.887	7011062	1.62	7010973	1.07	1.20	0.050	7011062
Total Vanadium (V)	mg/kg	61.6	7011062	74.3	7011191	68.8	7011062	41.3	7010973	54.8	41.1	2.0	7011062
Total Zinc (Zn)	mg/kg	271	7011062	658	7011191	290	7011062	78.7	7010973	68.4	51.2	1.0	7011062
Total Zirconium (Zr)	mg/kg	2.99	7011062	4.88	7011191	3.30	7011062	2.67	7010973	3.61	2.73	0.50	7011062

RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9331		GY9332	GY9333		GY9334	GY9335		GY9336		
Sampling Date		2013/07/19		2013/07/17	2013/07/17		2013/07/17	2013/07/17		2013/07/17		
	UNITS	**SP-46**	**QC Batch**	**CS-07**	**CS-08**	**QC Batch**	**CS-09**	**CS-10**	**QC Batch**	**CS-11**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.28	7011110	12.4	12.5	7010976	11.5	8.31	7011240	8.60	0.010	7010976
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	14300	7011062	7640	6580	7010973	5600	9050	7011191	3660	100	7010973
Total Antimony (Sb)	mg/kg	1.12	7011062	0.96	0.59	7010973	1.83	2.61	7011191	3.38	0.10	7010973
Total Arsenic (As)	mg/kg	6.57	7011062	3.28	1.58	7010973	0.54	1.84	7011191	22.9	0.50	7010973
Total Barium (Ba)	mg/kg	75.0	7011062	62.6	88.6	7010973	60.9	149	7011191	68.2	0.10	7010973
Total Beryllium (Be)	mg/kg	<0.40	7011062	<0.40	<0.40	7010973	<0.40	<0.40	7011191	<0.40	0.40	7010973
Total Bismuth (Bi)	mg/kg	<0.10	7011062	<0.10	<0.10	7010973	<0.10	0.14	7011191	<0.10	0.10	7010973
Total Cadmium (Cd)	mg/kg	0.238	7011062	0.170	0.126	7010973	0.136	0.169	7011191	0.051	0.050	7010973
Total Calcium (Ca)	mg/kg	108000	7011062	192000	242000	7010973	281000	166000	7011191	280000	100	7010973
Total Chromium (Cr)	mg/kg	23.5	7011062	7.7	8.8	7010973	6.5	10.6	7011191	1.1	1.0	7010973
Total Cobalt (Co)	mg/kg	9.96	7011062	4.53	3.04	7010973	2.34	4.25	7011191	0.71	0.30	7010973
Total Copper (Cu)	mg/kg	49.0	7011062	18.3	14.9	7010973	14.4	23.0	7011191	5.36	0.50	7010973
Total Iron (Fe)	mg/kg	21300	7011062	8680	7300	7010973	6010	10600	7011191	2190	100	7010973
Total Lead (Pb)	mg/kg	77.2	7011062	13.3	14.0	7010973	221	51.2	7011191	7.79	0.10	7010973
Total Lithium (Li)	mg/kg	12.3	7011062	<5.0	<5.0	7010973	<5.0	<5.0	7011191	<5.0	5.0	7010973
Total Magnesium (Mg)	mg/kg	29300	7011062	48700	16300	7010973	7530	13100	7011191	5210	100	7010973
Total Manganese (Mn)	mg/kg	501	7011062	719	718	7010973	505	416	7011191	248	0.20	7010973
Total Mercury (Hg)	mg/kg	0.076	7011062	<0.050	<0.050	7010973	<0.050	<0.050	7011191	<0.050	0.050	7010973
Total Molybdenum (Mo)	mg/kg	1.53	7011062	0.94	0.97	7010973	0.72	0.43	7011191	0.27	0.10	7010973
Total Nickel (Ni)	mg/kg	20.9	7011062	7.04	5.94	7010973	5.43	8.96	7011191	<0.80	0.80	7010973
Total Phosphorus (P)	mg/kg	532	7011062	606	739	7010973	443	808	7011191	789	10	7010973
Total Potassium (K)	mg/kg	1050	7011062	353	262	7010973	219	482	7011191	251	100	7010973
Total Selenium (Se)	mg/kg	<0.50	7011062	<0.50	<0.50	7010973	<0.50	<0.50	7011191	<0.50	0.50	7010973
Total Silver (Ag)	mg/kg	0.061	7011062	<0.050	<0.050	7010973	<0.050	<0.050	7011191	<0.050	0.050	7010973
Total Sodium (Na)	mg/kg	4590	7011062	3070	595	7010973	186	815	7011191	1670	100	7010973
Total Strontium (Sr)	mg/kg	630	7011062	288	372	7010973	330	942	7011191	361	0.10	7010973
Total Thallium (Tl)	mg/kg	<0.050	7011062	<0.050	<0.050	7010973	<0.050	<0.050	7011191	<0.050	0.050	7010973
Total Tin (Sn)	mg/kg	1.83	7011062	0.61	0.65	7010973	2.20	14.0	7011191	1.10	0.10	7010973
Total Titanium (Ti)	mg/kg	694	7011062	357	335	7010973	267	478	7011191	69.4	1.0	7010973
Total Uranium (U)	mg/kg	1.47	7011062	4.24	2.79	7010973	1.15	0.947	7011191	0.843	0.050	7010973
Total Vanadium (V)	mg/kg	52.2	7011062	25.1	21.9	7010973	18.4	32.2	7011191	77.5	2.0	7010973
Total Zinc (Zn)	mg/kg	98.9	7011062	24.5	21.6	7010973	27.2	32.9	7011191	7.4	1.0	7010973
Total Zirconium (Zr)	mg/kg	3.47	7011062	2.19	1.57	7010973	0.79	2.37	7011191	0.95	0.50	7010973

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		GY9342	GY9343	GY9344		GY9345	GY9346		GY9347		
Sampling Date		2013/07/17	2013/07/17	2013/07/17		2013/07/17	2013/07/17		2013/07/17		
	UNITS	**CS-12**	**CS-13**	**CS-14**	**QC Batch**	**CS-15**	**CS-16**	**QC Batch**	**CS-17**	**RDL**	**QC Batch**
Physical Properties											
Soluble (2:1) pH	pH Units	7.69	8.77	9.13	7011240	9.80	10.0	7010976	11.7	0.010	7011240
Total Metals by ICPMS											
Total Aluminum (Al)	mg/kg	23900	12600	11800	7011191	5390	6950	7010973	4110	100	7011191
Total Antimony (Sb)	mg/kg	0.91	0.15	0.13	7011191	0.29	0.26	7010973	0.22	0.10	7011191
Total Arsenic (As)	mg/kg	4.67	1.60	3.11	7011191	1.15	3.73	7010973	1.54	0.50	7011191
Total Barium (Ba)	mg/kg	111	35.0	59.6	7011191	28.3	53.9	7010973	18.1	0.10	7011191
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	7011191	<0.40	<0.40	7010973	<0.40	0.40	7011191
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	7011191	<0.10	<0.10	7010973	<0.10	0.10	7011191
Total Cadmium (Cd)	mg/kg	0.241	0.185	0.196	7011191	0.135	0.226	7010973	0.216	0.050	7011191
Total Calcium (Ca)	mg/kg	7920	52400	12000	7011191	135000	182000	7010973	300000	100	7011191
Total Chromium (Cr)	mg/kg	34.7	19.0	20.1	7011191	2.4	10.8	7010973	3.0	1.0	7011191
Total Cobalt (Co)	mg/kg	12.3	6.99	7.97	7011191	2.24	3.59	7010973	0.95	0.30	7011191
Total Copper (Cu)	mg/kg	137	18.8	32.0	7011191	7.28	10.7	7010973	5.84	0.50	7011191
Total Iron (Fe)	mg/kg	28700	16400	18700	7011191	4440	9790	7010973	3390	100	7011191
Total Lead (Pb)	mg/kg	12.1	15.7	2.79	7011191	13.1	28.0	7010973	25.0	0.10	7011191
Total Lithium (Li)	mg/kg	13.6	11.6	9.8	7011191	<5.0	<5.0	7010973	<5.0	5.0	7011191
Total Magnesium (Mg)	mg/kg	5610	13400	6540	7011191	102000	91600	7010973	4940	100	7011191
Total Manganese (Mn)	mg/kg	459	303	298	7011191	365	269	7010973	148	0.20	7011191
Total Mercury (Hg)	mg/kg	<0.050	<0.050	<0.050	7011191	<0.050	<0.050	7010973	<0.050	0.050	7011191
Total Molybdenum (Mo)	mg/kg	1.68	0.18	0.14	7011191	0.92	2.94	7010973	6.25	0.10	7011191
Total Nickel (Ni)	mg/kg	25.2	14.8	20.5	7011191	3.10	8.26	7010973	2.67	0.80	7011191
Total Phosphorus (P)	mg/kg	369	434	420	7011191	200	368	7010973	123	10	7011191
Total Potassium (K)	mg/kg	701	425	639	7011191	248	342	7010973	<100	100	7011191
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	7011191	<0.50	<0.50	7010973	<0.50	0.50	7011191
Total Silver (Ag)	mg/kg	0.123	0.055	0.084	7011191	<0.050	<0.050	7010973	<0.050	0.050	7011191
Total Sodium (Na)	mg/kg	228	653	282	7011191	1910	745	7010973	250	100	7011191
Total Strontium (Sr)	mg/kg	50.3	311	52.3	7011191	345	577	7010973	399	0.10	7011191
Total Thallium (Tl)	mg/kg	0.074	<0.050	<0.050	7011191	<0.050	<0.050	7010973	<0.050	0.050	7011191
Total Tin (Sn)	mg/kg	1.64	0.30	0.25	7011191	0.19	0.48	7010973	0.52	0.10	7011191
Total Titanium (Ti)	mg/kg	965	883	948	7011191	170	250	7010973	166	1.0	7011191
Total Uranium (U)	mg/kg	0.665	0.584	0.245	7011191	3.13	3.14	7010973	4.07	0.050	7011191
Total Vanadium (V)	mg/kg	72.2	49.4	54.6	7011191	14.8	19.5	7010973	14.2	2.0	7011191
Total Zinc (Zn)	mg/kg	388	30.8	36.5	7011191	14.5	25.9	7010973	58.0	1.0	7011191
Total Zirconium (Zr)	mg/kg	2.98	3.59	4.80	7011191	3.69	4.27	7010973	2.39	0.50	7011191

RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

TCLP METALS (SOIL)

Maxxam ID		GY9296	GY9297		
Sampling Date		2013/07/17	2013/07/17		
	UNITS	**SP-13**	**SP-14**	**RDL**	**QC Batch**
Metals					
LEACHATE Antimony (Sb)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Arsenic (As)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Barium (Ba)	mg/L	0.30	0.25	0.10	7018396
LEACHATE Beryllium (Be)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Boron (B)	mg/L	0.20	0.19	0.10	7018396
LEACHATE Cadmium (Cd)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Chromium (Cr)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Cobalt (Co)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Copper (Cu)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Iron (Fe)	mg/L	4.23	4.16	0.50	7018396
LEACHATE Lead (Pb)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Mercury (Hg)	mg/L	<0.0020	<0.0020	0.0020	7018396
LEACHATE Molybdenum (Mo)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Nickel (Ni)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Selenium (Se)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Silver (Ag)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Thallium (Tl)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Uranium (U)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Vanadium (V)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Zinc (Zn)	mg/L	<0.10	<0.10	0.10	7018396
LEACHATE Zirconium (Zr)	mg/L	<0.10	<0.10	0.10	7018396

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		GY9298		GY9299		GY9300		GY9301		GY9302		GY9303		GY9304		
Sampling Date		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		2013/07/17		
	UNITS	**SP-15**	**RDL**	**SP-16**	**RDL**	**SP-17**	**RDL**	**SP-18**	**RDL**	**SP-19**	**RDL**	**SP-20**	**RDL**	**SP-21**	**RDL**	**QC Batch**
ANIONS																
Soluble Chloride (Cl)	mg/L	599	5.0	97.9	5.0	257	5.0	364	5.0	335	5.0	365	5.0	297	5.0	7018871
Calculated Parameters																
Soluble Chloride (Cl)	mg/kg	312	2.6	49.8	2.5	159	3.1	239	3.3	178	2.7	216	3.0	158	2.7	7009900
Soluble Sodium (Na)	mg/kg	133	2.6	10.0	2.5	57.1	3.1	91.3	3.3	45.6	2.7	66.7	3.0	55.3	2.7	7009906
Soluble Parameters																
Saturation %	%	52.1	1.0	50.8	1.0	61.7	1.0	65.7	1.0	53.1	1.0	59.2	1.0	53.3	1.0	7015355
Wet Soluble Sodium (Na)	mg/L	255	5.0	19.7	5.0	92.5	5.0	139	5.0	85.9	5.0	113	5.0	104	5.0	7016344

Maxxam ID		GY9305		GY9306			GY9307			GY9308		GY9309		
Sampling Date		2013/07/17		2013/07/18			2013/07/18			2013/07/18		2013/07/18		
	UNITS	**SP-22**	**RDL**	**SP-23**	**RDL**	**QC Batch**	**SP-24**	**RDL**	**QC Batch**	**SP-25**	**RDL**	**SP-26**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	430	5.0	2140	50	7018871	1440	5.0	7020915	920	5.0	501	5.0	7018871
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	282	3.3	1430	33	7009900	930	3.2	7009900	664	3.6	322	3.2	7009900
Soluble Sodium (Na)	mg/kg	92.6	3.3	831	3.3	7009906	366	3.2	7009906	235	3.6	79.4	3.2	7009906
Soluble Parameters														
Saturation %	%	65.7	1.0	66.5	1.0	7015355	64.7	1.0	7015355	72.2	1.0	64.3	1.0	7015355
Wet Soluble Sodium (Na)	mg/L	141	5.0	1250	5.0	7016344	565	5.0	7016344	326	5.0	124	5.0	7016344

Maxxam ID		GY9310		GY9311		GY9312		GY9313		GY9314		GY9315		
Sampling Date		2013/07/18		2013/07/18		2013/07/18		2013/07/18		2013/07/18		2013/07/18		
	UNITS	**SP-27**	**RDL**	**SP-28**	**RDL**	**SP-29**	**RDL**	**SP-30**	**QC Batch**	**SP-31**	**RDL**	**SP-32**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	674	5.0	574	5.0	296	5.0	484	7018871	388	5.0	817	5.0	7018868
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	495	3.7	408	3.6	157	2.6	366	7009900	298	3.8	569	3.5	7009900
Soluble Sodium (Na)	mg/kg	131	3.7	115	3.6	33.5	2.6	136	7009906	81.6	3.8	177	3.5	7009906
Soluble Parameters														
Saturation %	%	73.5	1.0	71.1	1.0	52.8	1.0	75.5	7015355	76.7	1.0	69.6	1.0	7015405
Wet Soluble Sodium (Na)	mg/L	178	5.0	162	5.0	63.4	5.0	180	7016344	106	5.0	255	5.0	7016148

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		GY9316		GY9317		GY9318		GY9319		GY9320		GY9321		
Sampling Date		2013/07/18		2013/07/18		2013/07/18		2013/07/18		2013/07/18		2013/07/19		
	UNITS	**SP-33**	**RDL**	**SP-34**	**RDL**	**SP-35**	**RDL**	**SP-36**	**RDL**	**SP-37**	**RDL**	**SP-38**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	1270	5.0	874	5.0	777	5.0	874	5.0	1000	5.0	579	5.0	7018868
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	854	3.4	636	3.6	429	2.8	548	3.1	534	2.7	322	2.8	7009900
Soluble Sodium (Na)	mg/kg	330	3.4	240	3.6	111	2.8	175	3.1	175	2.7	85.3	2.8	7009906
Soluble Parameters														
Saturation %	%	67.4	1.0	72.8	1.0	55.1	1.0	62.7	1.0	53.3	1.0	55.6	1.0	7015405
Wet Soluble Sodium (Na)	mg/L	489	5.0	330	5.0	201	5.0	279	5.0	328	5.0	153	5.0	7016148

Maxxam ID		GY9322			GY9323			GY9324		GY9325		GY9328		
Sampling Date		2013/07/19			2013/07/19			2013/07/19		2013/07/19		2013/07/19		
	UNITS	**SP-39**	**RDL**	**QC Batch**	**SP-40**	**RDL**	**QC Batch**	**SP-41**	**RDL**	**SP-42**	**RDL**	**SP-43**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	2200	50	7018868	470	5.0	7020973	1330	5.0	1540	5.0	2630	50	7018868
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	1260	29	7009900	215	2.3	7009900	988	3.7	873	2.8	1810	34	7009900
Soluble Sodium (Na)	mg/kg	641	2.9	7009906	62.1	2.3	7009906	435	3.7	305	2.8	938	3.4	7009906
Soluble Parameters														
Saturation %	%	57.5	1.0	7015405	45.7	1.0	7015405	74.2	1.0	56.5	1.0	68.6	1.0	7015405
Wet Soluble Sodium (Na)	mg/L	1110	5.0	7016148	136	5.0	7016148	587	5.0	540	5.0	1370	5.0	7016148

Maxxam ID		GY9329			GY9330			GY9331		
Sampling Date		2013/07/19			2013/07/19			2013/07/19		
	UNITS	**SP-44**	**RDL**	**QC Batch**	**SP-45**	**RDL**	**QC Batch**	**SP-46**	**RDL**	**QC Batch**
ANIONS										
Soluble Chloride (Cl)	mg/L	3460	50	7020973	11200	50	7018868	8460	50	7020973
Calculated Parameters										
Soluble Chloride (Cl)	mg/kg	1620	23	7009900	7010	31	7009900	5140	30	7009900
Soluble Sodium (Na)	mg/kg	749	2.3	7009906	3770	3.1	7009906	2790	3.0	7009906
Soluble Parameters										
Saturation %	%	46.9	1.0	7015405	62.7	1.0	7015405	60.7	1.0	7015405
Wet Soluble Sodium (Na)	mg/L	1600	5.0	7016148	6010	5.0	7016148	4590	5.0	7016148

RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9298	GY9299		GY9300	GY9301	GY9302	GY9303	GY9304	GY9305		
Sampling Date		2013/07/17	2013/07/17		2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17		
	UNITS	**SP-15**	**SP-16**	**QC Batch**	**SP-17**	**SP-18**	**SP-19**	**SP-20**	**SP-21**	**SP-22**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	2.2	3.5	7007721	4.3	3.4	1.7	1.6	2.9	4.5	0.10	7007721
Benzo[a]pyrene equivalency	N/A	0.18	0.27	7007721	0.33	0.28	0.14	0.14	0.23	0.36	0.10	7007721
Polycyclic Aromatics												
Naphthalene	mg/kg	<0.010	<0.010	7013758	0.016	<0.010	<0.010	<0.010	<0.010	0.010	0.010	7016527
2-Methylnaphthalene	mg/kg	<0.020	<0.020	7013758	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7016527
Acenaphthylene	mg/kg	0.0056	0.039	7013758	0.015	0.012	0.0073	0.0064	0.014	0.015	0.0050	7016527
Acenaphthene	mg/kg	<0.0050	<0.0050	7013758	0.011	0.0054	<0.0050	<0.0050	<0.0050	0.0065	0.0050	7016527
Fluorene	mg/kg	<0.020	<0.020	7013758	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7016527
Phenanthrene	mg/kg	0.091	0.14	7013758	0.26	0.13	0.083	0.063	0.11	0.19	0.020	7016527
Anthracene	mg/kg	0.021	0.032	7013758	0.043	0.031	0.017	0.012	0.027	0.039	0.0040	7016527
Fluoranthene	mg/kg	0.20	0.31	7013758	0.50	0.32	0.17	0.15	0.26	0.45	0.020	7016527
Pyrene	mg/kg	0.17	0.30	7013758	0.43	0.29	0.15	0.13	0.23	0.41	0.020	7016527
Benzo(a)anthracene	mg/kg	0.11	0.17	7013758	0.22	0.18	0.082	0.077	0.14	0.24	0.020	7016527
Chrysene	mg/kg	0.13	0.21	7013758	0.27	0.20	0.097	0.088	0.18	0.26	0.020	7016527
Benzo(b&j)fluoranthene	mg/kg	0.17	0.28	7013758	0.33	0.26	0.13	0.12	0.21	0.34	0.020	7016527
Benzo(b)fluoranthene	mg/kg	0.11	0.18	7013758	0.22	0.17	0.080	0.073	0.13	0.21	0.020	7016527
Benzo(k)fluoranthene	mg/kg	0.046	0.078	7013758	0.095	0.076	0.038	0.035	0.067	0.10	0.020	7016527
Benzo(a)pyrene	mg/kg	0.11	0.18	7013758	0.22	0.18	0.085	0.082	0.15	0.25	0.020	7016527
Indeno(1,2,3-cd)pyrene	mg/kg	0.063	0.11	7013758	0.14	0.11	0.055	0.053	0.097	0.15	0.050	7016527
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7013758	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7016527
Benzo(g,h,i)perylene	mg/kg	0.074	0.12	7013758	0.16	0.12	0.061	0.060	0.10	0.17	0.050	7016527
Low Molecular Weight PAH`s	mg/kg	0.12	0.21	7007722	0.34	0.18	0.11	0.082	0.15	0.26	0.050	7007722
High Molecular Weight PAH`s	mg/kg	1.2	1.9	7007722	2.6	1.9	0.94	0.87	1.6	2.6	0.050	7007722
Total PAH	mg/kg	1.3	2.1	7007722	2.9	2.1	1.0	0.95	1.7	2.8	0.050	7007722
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	95	94	7013758	98	101	103	98	102	93		7016527
D8-ACENAPHTHYLENE (sur.)	%	96	96	7013758	99	101	103	98	104	96		7016527
D8-NAPHTHALENE (sur.)	%	94	95	7013758	98	99	102	97	103	97		7016527
TERPHENYL-D14 (sur.)	%	94	93	7013758	99	105	106	100	104	96		7016527

N/A = Not Applicable
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Maxxam

Success Through Science®

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9306	GY9307	GY9308	GY9309	GY9310	GY9311	GY9312	GY9313	GY9314		
Sampling Date		2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18	2013/07/18		
	UNITS	**SP-23**	**SP-24**	**SP-25**	**SP-26**	**SP-27**	**SP-28**	**SP-29**	**SP-30**	**SP-31**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	3.1	1.2	0.99	2.1	3.3	4.0	1.8	6.0	13	0.10	7007721
Benzo[a]pyrene equivalency	N/A	0.24	0.10	<0.10	0.17	0.26	0.32	0.15	0.47	0.94	0.10	7007721
Polycyclic Aromatics												
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7016527
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7016527
Acenaphthylene	mg/kg	0.013	0.0078	0.0057	0.0090	0.011	0.013	0.0084	0.019	0.038	0.0050	7016527
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0065	0.0052	<0.0050	<0.0050	<0.0050	0.0050	7016527
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.031	0.020	7016527
Phenanthrene	mg/kg	0.11	0.040	0.044	0.069	0.16	0.15	0.077	0.060	0.19	0.020	7016527
Anthracene	mg/kg	0.037	0.0097	0.0099	0.018	0.035	0.035	0.016	0.049	0.18	0.0040	7016527
Fluoranthene	mg/kg	0.18	0.10	0.098	0.18	0.35	0.37	0.17	0.14	0.45	0.020	7016527
Pyrene	mg/kg	0.16	0.098	0.093	0.16	0.30	0.32	0.15	0.19	0.33	0.020	7016527
Benzo(a)anthracene	mg/kg	0.14	0.058	0.047	0.10	0.17	0.19	0.089	0.20	0.78	0.020	7016527
Chrysene	mg/kg	0.22	0.070	0.059	0.12	0.21	0.22	0.11	0.34	1.2	0.020	7016527
Benzo(b&j)fluoranthene	mg/kg	0.25	0.085	0.072	0.16	0.26	0.31	0.14	0.52	1.0	0.020	7016527
Benzo(b)fluoranthene	mg/kg	0.16	0.051	0.045	0.10	0.17	0.20	0.086	0.34	0.65	0.020	7016527
Benzo(k)fluoranthene	mg/kg	0.076	0.025	0.020	0.050	0.072	0.090	0.042	0.13	0.32	0.020	7016527
Benzo(a)pyrene	mg/kg	0.16	0.057	0.046	0.11	0.17	0.22	0.091	0.29	0.53	0.020	7016527
Indeno(1,2,3-cd)pyrene	mg/kg	0.099	<0.050	<0.050	0.068	0.11	0.14	0.060	0.16	0.34	0.050	7016527
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.070	0.15	0.050	7016527
Benzo(g,h,i)perylene	mg/kg	0.10	<0.050	<0.050	0.077	0.12	0.16	0.067	0.14	0.30	0.050	7016527
Low Molecular Weight PAH`s	mg/kg	0.16	0.057	0.059	0.095	0.21	0.20	0.10	0.13	0.45	0.050	7007722
High Molecular Weight PAH`s	mg/kg	1.5	0.55	0.48	1.1	1.9	2.2	1.0	2.5	6.0	0.050	7007722
Total PAH	mg/kg	1.7	0.60	0.54	1.2	2.1	2.4	1.1	2.7	6.4	0.050	7007722
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	100	106	101	100	105	103	106	103	104		7016527
D8-ACENAPHTHYLENE (sur.)	%	103	106	102	101	105	102	106	103	107		7016527
D8-NAPHTHALENE (sur.)	%	103	106	102	100	106	102	105	103	106		7016527
TERPHENYL-D14 (sur.)	%	102	109	103	102	107	106	109	105	107		7016527

N/A = Not Applicable
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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9315	GY9316	GY9317	GY9318		GY9319	GY9320	GY9321		
Sampling Date		2013/07/18	2013/07/18	2013/07/18	2013/07/18		2013/07/18	2013/07/18	2013/07/19		
	UNITS	**SP-32**	**SP-33**	**SP-34**	**SP-35**	**QC Batch**	**SP-36**	**SP-37**	**SP-38**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	13	10	1.8	2.4	7007721	1.9	0.85	1.5	0.10	7007721
Benzo[a]pyrene equivalency	N/A	1.0	0.81	0.14	0.19	7007721	0.15	<0.10	0.13	0.10	7007721
Polycyclic Aromatics											
Naphthalene	mg/kg	0.014	0.017	<0.010	<0.010	7016527	<0.010	0.014	0.015	0.010	7017242
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	7016527	<0.020	0.025	<0.020	0.020	7017242
Acenaphthylene	mg/kg	0.031	0.019	0.0083	0.0085	7016527	0.0069	0.0077	0.0064	0.0050	7017242
Acenaphthene	mg/kg	0.027	0.028	0.0071	0.0056	7016527	<0.0050	<0.0050	<0.0050	0.0050	7017242
Fluorene	mg/kg	0.035	0.039	<0.020	<0.020	7016527	<0.020	<0.020	<0.020	0.020	7017242
Phenanthrene	mg/kg	0.63	0.68	0.080	0.12	7016527	0.10	0.073	0.087	0.020	7017242
Anthracene	mg/kg	0.15	0.12	0.016	0.024	7016527	0.025	0.016	0.022	0.0040	7017242
Fluoranthene	mg/kg	1.4	1.3	0.17	0.25	7016527	0.22	0.11	0.18	0.020	7017242
Pyrene	mg/kg	1.1	0.94	0.15	0.20	7016527	0.17	0.10	0.16	0.020	7017242
Benzo(a)anthracene	mg/kg	0.67	0.56	0.086	0.12	7016527	0.093	0.044	0.076	0.020	7017242
Chrysene	mg/kg	0.76	0.67	0.11	0.14	7016527	0.11	0.049	0.088	0.020	7017242
Benzo(b&j)fluoranthene	mg/kg	0.98	0.80	0.13	0.18	7016527	0.15	0.064	0.11	0.020	7017242
Benzo(b)fluoranthene	mg/kg	0.63	0.53	0.086	0.12	7016527	0.098	0.039	0.066	0.020	7017242
Benzo(k)fluoranthene	mg/kg	0.28	0.22	0.040	0.053	7016527	0.041	<0.020	0.036	0.020	7017242
Benzo(a)pyrene	mg/kg	0.68	0.52	0.085	0.12	7016527	0.092	0.041	0.074	0.020	7017242
Indeno(1,2,3-cd)pyrene	mg/kg	0.43	0.32	0.051	0.076	7016527	<0.050	<0.050	<0.050	0.050	7017242
Dibenz(a,h)anthracene	mg/kg	0.12	0.089	<0.050	<0.050	7016527	<0.050	<0.050	<0.050	0.050	7017242
Benzo(g,h,i)perylene	mg/kg	0.47	0.35	0.056	0.084	7016527	0.055	<0.050	<0.050	0.050	7017242
Low Molecular Weight PAH`s	mg/kg	0.88	0.90	0.11	0.16	7007722	0.13	0.14	0.13	0.050	7007722
High Molecular Weight PAH`s	mg/kg	7.5	6.3	0.97	1.3	7007722	1.0	0.45	0.78	0.050	7007722
Total PAH	mg/kg	8.4	7.2	1.1	1.5	7007722	1.2	0.59	0.91	0.050	7007722
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	98	100	99	98	7016527	93	99	96		7017242
D8-ACENAPHTHYLENE (sur.)	%	100	101	102	100	7016527	89	88	86		7017242
D8-NAPHTHALENE (sur.)	%	101	101	104	101	7016527	90	89	87		7017242
TERPHENYL-D14 (sur.)	%	100	101	102	100	7016527	97	96	96		7017242

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9322		GY9323	GY9324	GY9325	GY9328	GY9329	GY9330	GY9331		
Sampling Date		2013/07/19		2013/07/19	2013/07/19	2013/07/19	2013/07/19	2013/07/19	2013/07/19	2013/07/19		
	UNITS	**SP-39**	**QC Batch**	**SP-40**	**SP-41**	**SP-42**	**SP-43**	**SP-44**	**SP-45**	**SP-46**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	0.82	7007721	2.1	1.1	0.98	4.1	2.6	2.0	5.6	0.10	7007721
Benzo[a]pyrene equivalency	N/A	<0.10	7007721	0.17	<0.10	<0.10	0.31	0.20	0.15	0.41	0.10	7007721
Polycyclic Aromatics												
Naphthalene	mg/kg	0.027	7017439	0.011	0.039	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7017242
2-Methylnaphthalene	mg/kg	0.041	7017439	<0.020	0.026	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7017242
Acenaphthylene	mg/kg	<0.0050	7017439	0.015	0.0075	<0.0050	0.012	0.0064	0.0069	0.018	0.0050	7017242
Acenaphthene	mg/kg	0.0068	7017439	0.0059	0.0058	0.0053	0.0072	0.0070	<0.0050	0.011	0.0050	7017242
Fluorene	mg/kg	<0.020	7017439	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7017242
Phenanthrene	mg/kg	0.099	7017439	0.14	0.074	0.046	0.18	0.16	0.072	0.25	0.020	7017242
Anthracene	mg/kg	0.0099	7017439	0.028	0.012	0.013	0.050	0.037	0.022	0.087	0.0040	7017242
Fluoranthene	mg/kg	0.13	7017439	0.25	0.13	0.089	0.44	0.32	0.16	0.60	0.020	7017242
Pyrene	mg/kg	0.096	7017439	0.21	0.10	0.070	0.34	0.25	0.13	0.43	0.020	7017242
Benzo(a)anthracene	mg/kg	0.044	7017439	0.098	0.047	0.044	0.21	0.14	0.090	0.29	0.020	7017242
Chrysene	mg/kg	0.071	7017439	0.12	0.070	0.056	0.24	0.16	0.11	0.34	0.020	7017242
Benzo(b&j)fluoranthene	mg/kg	0.064	7017439	0.16	0.085	0.074	0.33	0.21	0.17	0.43	0.020	7017242
Benzo(b)fluoranthene	mg/kg	0.042	7017439	0.10	0.052	0.048	0.22	0.13	0.11	0.28	0.020	7017242
Benzo(k)fluoranthene	mg/kg	<0.020	7017439	0.045	0.023	0.020	0.089	0.055	0.044	0.15	0.020	7017242
Benzo(a)pyrene	mg/kg	0.026	7017439	0.11	0.046	0.041	0.21	0.13	0.095	0.28	0.020	7017242
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	7017439	0.060	<0.050	<0.050	0.10	0.062	<0.050	0.14	0.050	7017242
Dibenz(a,h)anthracene	mg/kg	<0.050	7017439	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7017242
Benzo(g,h,i)perylene	mg/kg	<0.050	7017439	0.070	<0.050	<0.050	0.11	0.068	0.054	0.15	0.050	7017242
Low Molecular Weight PAH`s	mg/kg	0.18	7007722	0.20	0.16	0.064	0.25	0.21	0.10	0.37	0.050	7007722
High Molecular Weight PAH`s	mg/kg	0.48	7007722	1.2	0.55	0.44	2.3	1.5	0.95	3.1	0.050	7007722
Total PAH	mg/kg	0.66	7007722	1.4	0.72	0.50	2.5	1.7	1.1	3.4	0.050	7007722
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	112	7017439	96	93	97	92	93	105	103		7017242
D8-ACENAPHTHYLENE (sur.)	%	101	7017439	90	88	90	89	86	89	90		7017242
D8-NAPHTHALENE (sur.)	%	104	7017439	91	93	93	91	87	93	94		7017242
TERPHENYL-D14 (sur.)	%	111	7017439	100	98	101	98	95	103	100		7017242

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9332	GY9333	GY9334	GY9335	GY9336	GY9342		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17	2013/07/17		
	UNITS	**CS-07**	**CS-08**	**CS-09**	**CS-10**	**CS-11**	**CS-12**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.31	0.41	0.31	7.8	0.39	0.31	0.10	7007721
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	0.60	<0.10	<0.10	0.10	7007721
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.010	7017242
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.022	0.020	7017242
Acenaphthylene	mg/kg	<0.0050	0.0056	<0.0050	0.020	<0.0050	<0.0050	0.0050	7017242
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	0.016	<0.0050	<0.0050	0.0050	7017242
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7017242
Phenanthrene	mg/kg	<0.020	<0.020	<0.020	0.32	<0.020	<0.020	0.020	7017242
Anthracene	mg/kg	<0.0040	<0.0040	<0.0040	0.075	<0.0040	<0.0040	0.0040	7017242
Fluoranthene	mg/kg	<0.020	0.027	<0.020	0.71	0.030	<0.020	0.020	7017242
Pyrene	mg/kg	<0.020	0.033	<0.020	0.54	0.025	<0.020	0.020	7017242
Benzo(a)anthracene	mg/kg	<0.020	<0.020	<0.020	0.35	<0.020	<0.020	0.020	7017242
Chrysene	mg/kg	<0.020	<0.020	<0.020	0.41	<0.020	<0.020	0.020	7017242
Benzo(b&j)fluoranthene	mg/kg	<0.020	0.027	<0.020	0.61	0.023	<0.020	0.020	7017242
Benzo(b)fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.39	<0.020	<0.020	0.020	7017242
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.20	<0.020	<0.020	0.020	7017242
Benzo(a)pyrene	mg/kg	<0.020	<0.020	<0.020	0.39	<0.020	<0.020	0.020	7017242
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	0.23	<0.050	<0.050	0.050	7017242
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	0.064	<0.050	<0.050	0.050	7017242
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	0.24	<0.050	<0.050	0.050	7017242
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050	0.43	<0.050	<0.050	0.050	7007722
High Molecular Weight PAH`s	mg/kg	<0.050	0.087	<0.050	4.1	0.078	<0.050	0.050	7007722
Total PAH	mg/kg	<0.050	0.092	<0.050	4.6	0.078	<0.050	0.050	7007722
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	95	88	94	97	97	95		7017242
D8-ACENAPHTHYLENE (sur.)	%	91	87	88	90	86	88		7017242
D8-NAPHTHALENE (sur.)	%	95	91	91	95	88	92		7017242
TERPHENYL-D14 (sur.)	%	98	90	96	99	99	99		7017242

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		GY9343	GY9344	GY9345	GY9346		GY9347		
Sampling Date		2013/07/17	2013/07/17	2013/07/17	2013/07/17		2013/07/17		
	UNITS	**CS-13**	**CS-14**	**CS-15**	**CS-16**	**QC Batch**	**CS-17**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.31	0.31	0.31	0.68	7007721	0.31	0.10	7007721
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	<0.10	<0.10	7007721	<0.10	0.10	7007721
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	<0.010	0.026	7017242	<0.010	0.010	7017439
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	0.026	7017242	<0.020	0.020	7017439
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	7017242	<0.0050	0.0050	7017439
Acenaphthene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	7017242	<0.0050	0.0050	7017439
Fluorene	mg/kg	<0.020	<0.020	<0.020	<0.020	7017242	<0.020	0.020	7017439
Phenanthrene	mg/kg	<0.020	<0.020	0.029	0.047	7017242	<0.020	0.020	7017439
Anthracene	mg/kg	<0.0040	<0.0040	0.0051	0.0065	7017242	<0.0040	0.0040	7017439
Fluoranthene	mg/kg	0.022	<0.020	0.029	0.072	7017242	0.031	0.020	7017439
Pyrene	mg/kg	0.021	<0.020	0.022	0.069	7017242	0.025	0.020	7017439
Benzo(a)anthracene	mg/kg	<0.020	<0.020	<0.020	0.030	7017242	<0.020	0.020	7017439
Chrysene	mg/kg	<0.020	<0.020	<0.020	0.062	7017242	<0.020	0.020	7017439
Benzo(b&j)fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.056	7017242	<0.020	0.020	7017439
Benzo(b)fluoranthene	mg/kg	<0.020	<0.020	<0.020	0.038	7017242	<0.020	0.020	7017439
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	<0.020	<0.020	7017242	<0.020	0.020	7017439
Benzo(a)pyrene	mg/kg	<0.020	<0.020	<0.020	<0.020	7017242	<0.020	0.020	7017439
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	<0.050	<0.050	7017242	<0.050	0.050	7017439
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	<0.050	7017242	<0.050	0.050	7017439
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	<0.050	<0.050	7017242	<0.050	0.050	7017439
Low Molecular Weight PAH`s	mg/kg	<0.050	<0.050	<0.050	0.11	7007722	<0.050	0.050	7007722
High Molecular Weight PAH`s	mg/kg	<0.050	<0.050	0.050	0.33	7007722	0.056	0.050	7007722
Total PAH	mg/kg	<0.050	<0.050	0.085	0.43	7007722	0.056	0.050	7007722
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	101	99	99	97	7017242	103		7017439
D8-ACENAPHTHYLENE (sur.)	%	91	90	91	89	7017242	98		7017439
D8-NAPHTHALENE (sur.)	%	95	95	93	92	7017242	100		7017439
TERPHENYL-D14 (sur.)	%	102	101	101	98	7017242	104		7017439

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

Package 1	5.7°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7008238	Moisture	2013/07/23					<0.30	%	4.4	20		
7010072	Moisture	2013/07/23					<0.30	%	3.9	20		
7010254	Moisture	2013/07/24					<0.30	%	5.2	20		
7010973	Total Antimony (Sb)	2013/07/23	95	75 - 125	95	75 - 125	<0.10	mg/kg	NC	30	89	70 - 130
7010973	Total Arsenic (As)	2013/07/23	100	75 - 125	99	75 - 125	<0.50	mg/kg	NC	30	95	70 - 130
7010973	Total Barium (Ba)	2013/07/23	101	75 - 125	100	75 - 125	<0.10	mg/kg	3.5	35	102	70 - 130
7010973	Total Beryllium (Be)	2013/07/23	105	75 - 125	105	75 - 125	<0.40	mg/kg	NC	30		
7010973	Total Cadmium (Cd)	2013/07/23	106	75 - 125	105	75 - 125	<0.050	mg/kg	NC	30	106	70 - 130
7010973	Total Chromium (Cr)	2013/07/23	103	75 - 125	102	75 - 125	<1.0	mg/kg	1.1	30	102	70 - 130
7010973	Total Cobalt (Co)	2013/07/23	102	75 - 125	103	75 - 125	<0.30	mg/kg	2.7	30	94	70 - 130
7010973	Total Copper (Cu)	2013/07/23	103	75 - 125	103	75 - 125	<0.50	mg/kg	7.7	30	91	70 - 130
7010973	Total Lead (Pb)	2013/07/23	105	75 - 125	102	75 - 125	<0.10	mg/kg	2.3	35	95	70 - 130
7010973	Total Lithium (Li)	2013/07/23	105	75 - 125	104	75 - 125	<5.0	mg/kg	NC	30		
7010973	Total Manganese (Mn)	2013/07/23	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.1	30	99	70 - 130
7010973	Total Mercury (Hg)	2013/07/23	104	75 - 125	102	75 - 125	<0.050	mg/kg	NC	35	89	70 - 130
7010973	Total Molybdenum (Mo)	2013/07/23	101	75 - 125	96	75 - 125	<0.10	mg/kg	NC	35	111	70 - 130
7010973	Total Nickel (Ni)	2013/07/23	102	75 - 125	100	75 - 125	<0.80	mg/kg	0.5	30	95	70 - 130
7010973	Total Selenium (Se)	2013/07/23	108	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30		
7010973	Total Silver (Ag)	2013/07/23	103	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35		
7010973	Total Strontium (Sr)	2013/07/23	102	75 - 125	99	75 - 125	<0.10	mg/kg	4.4	35	101	70 - 130
7010973	Total Thallium (Tl)	2013/07/23	101	75 - 125	96	75 - 125	<0.050	mg/kg	NC	30	82	70 - 130
7010973	Total Tin (Sn)	2013/07/23	94	75 - 125	94	75 - 125	<0.10	mg/kg	NC	35		
7010973	Total Titanium (Ti)	2013/07/23	NC	75 - 125	98	75 - 125	<1.0	mg/kg	0.4	35	96	70 - 130
7010973	Total Uranium (U)	2013/07/23	102	75 - 125	100	75 - 125	<0.050	mg/kg	0.2	30	94	70 - 130
7010973	Total Vanadium (V)	2013/07/23	102	75 - 125	100	75 - 125	<2.0	mg/kg	0.7	30	100	70 - 130
7010973	Total Zinc (Zn)	2013/07/23	111	75 - 125	107	75 - 125	<1.0	mg/kg	5.8	30	95	70 - 130
7010973	Total Aluminum (Al)	2013/07/23					<100	mg/kg	2.9	35	107	70 - 130
7010973	Total Calcium (Ca)	2013/07/23					<100	mg/kg	3.8	30	95	70 - 130
7010973	Total Iron (Fe)	2013/07/23					<100	mg/kg	1.2	30	93	70 - 130
7010973	Total Magnesium (Mg)	2013/07/23					<100	mg/kg	0.6	30	95	70 - 130
7010973	Total Phosphorus (P)	2013/07/23					<10	mg/kg	0.5	30	87	70 - 130
7010973	Total Bismuth (Bi)	2013/07/23					<0.10	mg/kg	NC	30		
7010973	Total Potassium (K)	2013/07/23					<100	mg/kg	NC	35		
7010973	Total Sodium (Na)	2013/07/23					<100	mg/kg	NC	35		
7010973	Total Zirconium (Zr)	2013/07/23					<0.50	mg/kg	NC	30		
7010976	Soluble (2:1) pH	2013/07/23			101	97 - 103			0	20		
7011062	Total Antimony (Sb)	2013/07/23	NC	75 - 125	99	75 - 125	<0.10	mg/kg	17.9	30	106	70 - 130
7011062	Total Arsenic (As)	2013/07/23	87	75 - 125	100	75 - 125	<0.50	mg/kg	14.9	30	101	70 - 130
7011062	Total Barium (Ba)	2013/07/23	NC	75 - 125	101	75 - 125	<0.10	mg/kg	1.5	35	106	70 - 130

Maxxam

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7011062	Total Beryllium (Be)	2013/07/23	104	75 - 125	110	75 - 125	<0.40	mg/kg	NC	30		
7011062	Total Cadmium (Cd)	2013/07/23	103	75 - 125	107	75 - 125	<0.050	mg/kg	6.1	30	119	70 - 130
7011062	Total Chromium (Cr)	2013/07/23	NC	75 - 125	101	75 - 125	<1.0	mg/kg	10.9	30	106	70 - 130
7011062	Total Cobalt (Co)	2013/07/23	95	75 - 125	102	75 - 125	<0.30	mg/kg	1.4	30	96	70 - 130
7011062	Total Copper (Cu)	2013/07/23	NC	75 - 125	105	75 - 125	<0.50	mg/kg	7.2	30	95	70 - 130
7011062	Total Lead (Pb)	2013/07/23	NC	75 - 125	102	75 - 125	<0.10	mg/kg	17.7	35	96	70 - 130
7011062	Total Lithium (Li)	2013/07/23	107	75 - 125	108	75 - 125	<5.0	mg/kg	NC	30		
7011062	Total Manganese (Mn)	2013/07/23	NC	75 - 125	104	75 - 125	<0.20	mg/kg	0.9	30	104	70 - 130
7011062	Total Mercury (Hg)	2013/07/23	92	75 - 125	102	75 - 125	<0.050	mg/kg	NC	35	91	70 - 130
7011062	Total Molybdenum (Mo)	2013/07/23	98	75 - 125	99	75 - 125	<0.10	mg/kg	1.4	35	110	70 - 130
7011062	Total Nickel (Ni)	2013/07/23	98	75 - 125	102	75 - 125	<0.80	mg/kg	9.2	30	105	70 - 130
7011062	Total Selenium (Se)	2013/07/23	104	75 - 125	106	75 - 125	<0.50	mg/kg	NC	30		
7011062	Total Silver (Ag)	2013/07/23	101	75 - 125	100	75 - 125	<0.050	mg/kg	NC	35		
7011062	Total Strontium (Sr)	2013/07/23	NC	75 - 125	100	75 - 125	<0.10	mg/kg	3.7	35	106	70 - 130
7011062	Total Thallium (Tl)	2013/07/23	96	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	89	70 - 130
7011062	Total Tin (Sn)	2013/07/23	88	75 - 125	95	75 - 125	<0.10	mg/kg	9.9	35		
7011062	Total Titanium (Ti)	2013/07/23	NC	75 - 125	97	75 - 125	<1.0	mg/kg	6.9	35	105	70 - 130
7011062	Total Uranium (U)	2013/07/23	96	75 - 125	95	75 - 125	<0.050	mg/kg	8.0	30	97	70 - 130
7011062	Total Vanadium (V)	2013/07/23	NC	75 - 125	100	75 - 125	<2.0	mg/kg	2.0	30	104	70 - 130
7011062	Total Zinc (Zn)	2013/07/23	NC	75 - 125	110	75 - 125	<1.0	mg/kg	2.2	30	97	70 - 130
7011062	Total Aluminum (Al)	2013/07/23					<100	mg/kg	2.4	35	105	70 - 130
7011062	Total Calcium (Ca)	2013/07/23					<100	mg/kg	3.3	30	85	70 - 130
7011062	Total Iron (Fe)	2013/07/23					<100	mg/kg	1.7	30	88	70 - 130
7011062	Total Magnesium (Mg)	2013/07/23					<100	mg/kg	5.8	30	90	70 - 130
7011062	Total Phosphorus (P)	2013/07/23					<10	mg/kg	5.0	30	89	70 - 130
7011062	Total Bismuth (Bi)	2013/07/23					<0.10	mg/kg	NC	30		
7011062	Total Potassium (K)	2013/07/23					<100	mg/kg	5.7	35		
7011062	Total Sodium (Na)	2013/07/23					<100	mg/kg	25.2	35		
7011062	Total Zirconium (Zr)	2013/07/23					<0.50	mg/kg	1.4	30		
7011110	Soluble (2:1) pH	2013/07/23			100	97 - 103			1.5	20		
7011191	Total Antimony (Sb)	2013/07/23	94	75 - 125	98	75 - 125	<0.10	mg/kg	NC	30	91	70 - 130
7011191	Total Arsenic (As)	2013/07/23	99	75 - 125	100	75 - 125	<0.50	mg/kg	4.7	30	91	70 - 130
7011191	Total Barium (Ba)	2013/07/23	NC	75 - 125	99	75 - 125	<0.10	mg/kg	2.9	35	95	70 - 130
7011191	Total Beryllium (Be)	2013/07/23	108	75 - 125	109	75 - 125	<0.40	mg/kg	NC	30		
7011191	Total Cadmium (Cd)	2013/07/23	106	75 - 125	106	75 - 125	<0.050	mg/kg	NC	30	103	70 - 130
7011191	Total Chromium (Cr)	2013/07/23	99	75 - 125	103	75 - 125	<1.0	mg/kg	5.5	30	99	70 - 130
7011191	Total Cobalt (Co)	2013/07/23	101	75 - 125	105	75 - 125	<0.30	mg/kg	0.5	30	91	70 - 130
7011191	Total Copper (Cu)	2013/07/23	NC	75 - 125	104	75 - 125	<0.50	mg/kg	7.2	30	88	70 - 130
7011191	Total Lead (Pb)	2013/07/23	97	75 - 125	100	75 - 125	<0.10	mg/kg	8.6	35	88	70 - 130

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7011191	Total Lithium (Li)	2013/07/23	105	75 - 125	106	75 - 125	<5.0	mg/kg	NC	30		
7011191	Total Manganese (Mn)	2013/07/23	NC	75 - 125	106	75 - 125	<0.20	mg/kg	2.3	30	96	70 - 130
7011191	Total Mercury (Hg)	2013/07/23	95	75 - 125	98	75 - 125	<0.050	mg/kg	NC	35	76	70 - 130
7011191	Total Molybdenum (Mo)	2013/07/23	104	75 - 125	100	75 - 125	<0.10	mg/kg	NC	35	96	70 - 130
7011191	Total Nickel (Ni)	2013/07/23	99	75 - 125	101	75 - 125	<0.80	mg/kg	2.6	30	88	70 - 130
7011191	Total Selenium (Se)	2013/07/23	105	75 - 125	106	75 - 125	<0.50	mg/kg	NC	30		
7011191	Total Silver (Ag)	2013/07/23	98	75 - 125	102	75 - 125	<0.050	mg/kg	NC	35		
7011191	Total Strontium (Sr)	2013/07/23	NC	75 - 125	100	75 - 125	<0.10	mg/kg	15.6	35	98	70 - 130
7011191	Total Thallium (Tl)	2013/07/23	92	75 - 125	99	75 - 125	<0.050	mg/kg	NC	30	81	70 - 130
7011191	Total Tin (Sn)	2013/07/23	96	75 - 125	96	75 - 125	<0.10	mg/kg	NC	35		
7011191	Total Titanium (Ti)	2013/07/23	NC	75 - 125	99	75 - 125	<1.0	mg/kg	8.0	35	102	70 - 130
7011191	Total Uranium (U)	2013/07/23	91	75 - 125	94	75 - 125	<0.050	mg/kg	NC	30	84	70 - 130
7011191	Total Vanadium (V)	2013/07/23	NC	75 - 125	100	75 - 125	<2.0	mg/kg	8.5	30	96	70 - 130
7011191	Total Zinc (Zn)	2013/07/23	NC	75 - 125	109	75 - 125	<1.0	mg/kg	1.3	30	91	70 - 130
7011191	Total Aluminum (Al)	2013/07/23					<100	mg/kg	1.1	35	98	70 - 130
7011191	Total Calcium (Ca)	2013/07/23					<100	mg/kg	1.1	30	78	70 - 130
7011191	Total Iron (Fe)	2013/07/23					<100	mg/kg	0.4	30	80	70 - 130
7011191	Total Magnesium (Mg)	2013/07/23					<100	mg/kg	0.4	30	85	70 - 130
7011191	Total Phosphorus (P)	2013/07/23					<10	mg/kg	0.5	30	83	70 - 130
7011191	Total Bismuth (Bi)	2013/07/23					<0.10	mg/kg	NC	30		
7011191	Total Potassium (K)	2013/07/23					<100	mg/kg	1.2	35		
7011191	Total Sodium (Na)	2013/07/23					<100	mg/kg	NC	35		
7011191	Total Zirconium (Zr)	2013/07/23					<0.50	mg/kg	8.2	30		
7011240	Soluble (2:1) pH	2013/07/23			100	97 - 103			0.1	20		
7012051	Moisture	2013/07/24					<0.30	%	2.5	20		
7013169	Initial pH of Sample	2013/07/24					2.85, RDL=N/A	pH Units	0.3	20		
7013169	Final pH of Leachate	2013/07/24					2.85, RDL=N/A	pH Units	1.1	20		
7013169	pH of Leaching Fluid	2013/07/24					2.85, RDL=N/A	pH Units	0	20		
7013169	pH after HCl	2013/07/24							4.5	20		
7013404	1,4-Difluorobenzene (sur.)	2013/07/23	104	70 - 130	105	70 - 130	92	%				
7013404	4-BROMOFLUOROBENZENE (sur.)	2013/07/23	101	70 - 130	101	70 - 130	101	%				
7013404	D10-ETHYLBENZENE (sur.)	2013/07/23	99	50 - 130	92	50 - 130	101	%				
7013404	D4-1,2-DICHLOROETHANE (sur.)	2013/07/23	100	70 - 130	101	70 - 130	108	%				
7013404	Benzene	2013/07/23	108	60 - 140	96	60 - 140	<0.0050	mg/kg	NC	40		
7013404	Toluene	2013/07/23	106	60 - 140	94	60 - 140	<0.020	mg/kg	NC	40		
7013404	Ethylbenzene	2013/07/23	110	60 - 140	97	60 - 140	<0.010	mg/kg	NC	40		
7013404	m & p-Xylene	2013/07/23	106	60 - 140	95	60 - 140	<0.040	mg/kg	NC	40		
7013404	o-Xylene	2013/07/23	109	60 - 140	96	60 - 140	<0.040	mg/kg	NC	40		
7013404	VH C6-C10	2013/07/23			100	60 - 140	<10	mg/kg	NC	40		

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QUALITY ASSURANCE REPORT

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QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7013404	Methyl-tert-butylether(MTBE)	2013/07/23					<0.10	mg/kg				
7013404	Styrene	2013/07/23					<0.030	mg/kg				
7013404	Xylenes (Total)	2013/07/23					<0.040	mg/kg	NC	40		
7013758	D10-ANTHRACENE (sur.)	2013/07/24	90	60 - 130	98	60 - 130	99	%				
7013758	D8-ACENAPHTHYLENE (sur.)	2013/07/24	94	50 - 130	99	50 - 130	99	%				
7013758	D8-NAPHTHALENE (sur.)	2013/07/24	92	50 - 130	99	50 - 130	99	%				
7013758	TERPHENYL-D14 (sur.)	2013/07/24	90	60 - 130	97	60 - 130	99	%				
7013758	Naphthalene	2013/07/24	79	50 - 130	90	50 - 130	<0.010	mg/kg	NC	50		
7013758	2-Methylnaphthalene	2013/07/24	97	50 - 130	112	50 - 130	<0.020	mg/kg	NC	50		
7013758	Acenaphthylene	2013/07/24	80	50 - 130	90	50 - 130	<0.0050	mg/kg	NC	50		
7013758	Acenaphthene	2013/07/24	83	50 - 130	94	50 - 130	<0.0050	mg/kg	NC	50		
7013758	Fluorene	2013/07/24	79	50 - 130	91	50 - 130	<0.020	mg/kg	NC	50		
7013758	Phenanthrene	2013/07/24	78	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7013758	Anthracene	2013/07/24	80	60 - 130	92	60 - 130	<0.0040	mg/kg	NC	50		
7013758	Fluoranthene	2013/07/24	74	60 - 130	88	60 - 130	<0.020	mg/kg	10.4	50		
7013758	Pyrene	2013/07/24	81	60 - 130	94	60 - 130	<0.020	mg/kg	7.6	50		
7013758	Benzo(a)anthracene	2013/07/24	69	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
7013758	Chrysene	2013/07/24	71	60 - 130	88	60 - 130	<0.020	mg/kg	10.2	50		
7013758	Benzo(b&j)fluoranthene	2013/07/24	71	60 - 130	93	60 - 130	<0.020	mg/kg	1.3	50		
7013758	Benzo(k)fluoranthene	2013/07/24	72	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
7013758	Benzo(a)pyrene	2013/07/24	74	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7013758	Indeno(1,2,3-cd)pyrene	2013/07/24	77	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
7013758	Dibenz(a,h)anthracene	2013/07/24	74	60 - 130	78	60 - 130	<0.050	mg/kg	NC	50		
7013758	Benzo(g,h,i)perylene	2013/07/24	75	60 - 130	87	60 - 130	<0.050	mg/kg	NC	50		
7013758	Benzo(b)fluoranthene	2013/07/24					<0.020	mg/kg	NC	N/A		
7015355	Saturation %	2013/07/24			106	80 - 120	<1.0	%	0.4	30		
7015405	Saturation %	2013/07/24			106	80 - 120	<1.0	%	1.1	30		
7016148	Wet Soluble Sodium (Na)	2013/07/25					<5.0	mg/L	0.09	30		
7016344	Wet Soluble Sodium (Na)	2013/07/24					<5.0	mg/L				
7016527	D10-ANTHRACENE (sur.)	2013/07/25	100	60 - 130	97	60 - 130	100	%				
7016527	D8-ACENAPHTHYLENE (sur.)	2013/07/25	102	50 - 130	99	50 - 130	100	%				
7016527	D8-NAPHTHALENE (sur.)	2013/07/25	98	50 - 130	99	50 - 130	98	%				
7016527	TERPHENYL-D14 (sur.)	2013/07/25	101	60 - 130	100	60 - 130	102	%				
7016527	Naphthalene	2013/07/25	89	50 - 130	87	50 - 130	<0.010	mg/kg	NC(1)	50		
7016527	2-Methylnaphthalene	2013/07/25	116	50 - 130	112	50 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Acenaphthylene	2013/07/25	94	50 - 130	89	50 - 130	<0.0050	mg/kg	NC(1)	50		
7016527	Acenaphthene	2013/07/25	96	50 - 130	92	50 - 130	<0.0050	mg/kg	NC(1)	50		
7016527	Fluorene	2013/07/25	99	50 - 130	93	50 - 130	<0.020	mg/kg	NC(2)	50		
7016527	Phenanthrene	2013/07/25	92	60 - 130	88	60 - 130	<0.020	mg/kg	NC(1)	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7016527	Anthracene	2013/07/25	93	60 - 130	87	60 - 130	<0.0040	mg/kg	NC(1)	50		
7016527	Fluoranthene	2013/07/25	96	60 - 130	91	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Pyrene	2013/07/25	98	60 - 130	93	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Benzo(a)anthracene	2013/07/25	92	60 - 130	89	60 - 130	<0.020	mg/kg	NC(2)	50		
7016527	Chrysene	2013/07/25	92	60 - 130	90	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Benzo(b&j)fluoranthene	2013/07/25	89	60 - 130	89	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Benzo(k)fluoranthene	2013/07/25	87	60 - 130	85	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Benzo(a)pyrene	2013/07/25	95	60 - 130	91	60 - 130	<0.020	mg/kg	NC(1)	50		
7016527	Indeno(1,2,3-cd)pyrene	2013/07/25	100	60 - 130	95	60 - 130	<0.050	mg/kg	NC(1)	50		
7016527	Dibenz(a,h)anthracene	2013/07/25	99	60 - 130	93	60 - 130	<0.050	mg/kg	NC(1)	50		
7016527	Benzo(g,h,i)perylene	2013/07/25	96	60 - 130	92	60 - 130	<0.050	mg/kg	NC(1)	50		
7016527	Benzo(b)fluoranthene	2013/07/25					<0.020	mg/kg	NC(1)	N/A		
7017242	D10-ANTHRACENE (sur.)	2013/07/24	97	60 - 130	90	60 - 130	93	%				
7017242	D8-ACENAPHTHYLENE (sur.)	2013/07/24	87	50 - 130	89	50 - 130	92	%				
7017242	D8-NAPHTHALENE (sur.)	2013/07/24	89	50 - 130	90	50 - 130	92	%				
7017242	TERPHENYL-D14 (sur.)	2013/07/24	95	60 - 130	92	60 - 130	96	%				
7017242	Naphthalene	2013/07/25	85	50 - 130	83	50 - 130	<0.010	mg/kg	NC	50		
7017242	2-Methylnaphthalene	2013/07/25	87	50 - 130	86	50 - 130	<0.020	mg/kg	NC	50		
7017242	Acenaphthylene	2013/07/25	85	50 - 130	85	50 - 130	<0.0050	mg/kg	NC	50		
7017242	Acenaphthene	2013/07/25	88	50 - 130	87	50 - 130	<0.0050	mg/kg	NC	50		
7017242	Fluorene	2013/07/25	85	50 - 130	86	50 - 130	<0.020	mg/kg	NC	50		
7017242	Phenanthrene	2013/07/25	81	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
7017242	Anthracene	2013/07/25	102	60 - 130	89	60 - 130	<0.0040	mg/kg	NC	50		
7017242	Fluoranthene	2013/07/25	94	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7017242	Pyrene	2013/07/25	95	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
7017242	Benzo(a)anthracene	2013/07/25	77	60 - 130	77	60 - 130	<0.020	mg/kg	NC	50		
7017242	Chrysene	2013/07/25	79	60 - 130	78	60 - 130	<0.020	mg/kg	NC	50		
7017242	Benzo(b&j)fluoranthene	2013/07/25	88	60 - 130	79	60 - 130	<0.020	mg/kg	NC	50		
7017242	Benzo(k)fluoranthene	2013/07/25	81	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
7017242	Benzo(a)pyrene	2013/07/25	87	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
7017242	Indeno(1,2,3-cd)pyrene	2013/07/25	75	60 - 130	80	60 - 130	<0.050	mg/kg	NC	50		
7017242	Dibenz(a,h)anthracene	2013/07/25	73	60 - 130	78	60 - 130	<0.050	mg/kg	NC	50		
7017242	Benzo(g,h,i)perylene	2013/07/25	67	60 - 130	75	60 - 130	<0.050	mg/kg	NC	50		
7017242	Benzo(b)fluoranthene	2013/07/25					<0.020	mg/kg	NC	N/A		
7017439	D10-ANTHRACENE (sur.)	2013/07/24	104	60 - 130	110	60 - 130	102	%				
7017439	D8-ACENAPHTHYLENE (sur.)	2013/07/24	101	50 - 130	103	50 - 130	100	%				
7017439	D8-NAPHTHALENE (sur.)	2013/07/24	101	50 - 130	103	50 - 130	101	%				
7017439	TERPHENYL-D14 (sur.)	2013/07/24	102	60 - 130	108	60 - 130	105	%				
7017439	Naphthalene	2013/07/24	92	50 - 130	96	50 - 130	<0.010	mg/kg	NC	50		

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QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7017439	2-Methylnaphthalene	2013/07/24	113	50 - 130	120	50 - 130	<0.020	mg/kg	NC	50		
7017439	Acenaphthylene	2013/07/24	94	50 - 130	97	50 - 130	<0.0050	mg/kg	NC	50		
7017439	Acenaphthene	2013/07/24	93	50 - 130	100	50 - 130	<0.0050	mg/kg	NC	50		
7017439	Fluorene	2013/07/24	93	50 - 130	97	50 - 130	<0.020	mg/kg	NC	50		
7017439	Phenanthrene	2013/07/24	92	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7017439	Anthracene	2013/07/24	103	60 - 130	111	60 - 130	<0.0040	mg/kg	NC	50		
7017439	Fluoranthene	2013/07/24	94	60 - 130	104	60 - 130	<0.020	mg/kg	26.2	50		
7017439	Pyrene	2013/07/24	97	60 - 130	105	60 - 130	<0.020	mg/kg	NC	50		
7017439	Benzo(a)anthracene	2013/07/24	82	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7017439	Chrysene	2013/07/24	81	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7017439	Benzo(b&j)fluoranthene	2013/07/24	91	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7017439	Benzo(k)fluoranthene	2013/07/24	85	60 - 130	101	60 - 130	<0.020	mg/kg	NC	50		
7017439	Benzo(a)pyrene	2013/07/24	93	60 - 130	100	60 - 130	<0.020	mg/kg	NC	50		
7017439	Indeno(1,2,3-cd)pyrene	2013/07/24	90	60 - 130	94	60 - 130	<0.050	mg/kg	NC	50		
7017439	Dibenz(a,h)anthracene	2013/07/24	88	60 - 130	91	60 - 130	<0.050	mg/kg	NC	50		
7017439	Benzo(g,h,i)perylene	2013/07/24	84	60 - 130	88	60 - 130	<0.050	mg/kg	NC	50		
7017439	Benzo(b)fluoranthene	2013/07/24					<0.020	mg/kg	NC	N/A		
7018396	LEACHATE Arsenic (As)	2013/07/24	108	75 - 125	100	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Beryllium (Be)	2013/07/24	100	75 - 125	97	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Cadmium (Cd)	2013/07/24	102	75 - 125	96	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Chromium (Cr)	2013/07/24	102	75 - 125	96	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Cobalt (Co)	2013/07/24	101	75 - 125	95	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Copper (Cu)	2013/07/24	102	75 - 125	97	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Lead (Pb)	2013/07/24	104	75 - 125	97	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Nickel (Ni)	2013/07/24	92	75 - 125	85	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Selenium (Se)	2013/07/24	109	75 - 125	102	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Uranium (U)	2013/07/24	104	75 - 125	96	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Vanadium (V)	2013/07/24	102	75 - 125	96	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Zinc (Zn)	2013/07/24	101	75 - 125	112	75 - 125	<0.10	mg/L	NC	35		
7018396	LEACHATE Antimony (Sb)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Barium (Ba)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Boron (B)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Iron (Fe)	2013/07/24					<0.50	mg/L	1.7	35		
7018396	LEACHATE Mercury (Hg)	2013/07/24					<0.0020	mg/L	NC	35		
7018396	LEACHATE Molybdenum (Mo)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Silver (Ag)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Thallium (Tl)	2013/07/24					<0.10	mg/L	NC	35		
7018396	LEACHATE Zirconium (Zr)	2013/07/24					<0.10	mg/L	NC	35		
7018868	Soluble Chloride (Cl)	2013/07/24					<5.0	mg/L	1.3	30		

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Maxxam Job #: B362197
Report Date: 2013/07/26

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7018871	Soluble Chloride (Cl)	2013/07/24					<5.0	mg/L				
7020915	Soluble Chloride (Cl)	2013/07/25					<5.0	mg/L				
7020973	Soluble Chloride (Cl)	2013/07/25					<5.0	mg/L				
7025146	Flash point	2013/07/26							NC	100		
7025147	Free Liquid	2013/07/26							NC	25		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to high sample moisture content.
(2) - RDL raised due to sample matrix interference.

Validation Signature Page

Maxxam Job #: B362197

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:
Company Name: #1756 PUBLIC WORKS & GOVERNMENT SERVI
Contact Name: Bradley Klaver
Address: 641- 800 BURRARD STREET, VANCOUVER BC V6Z 2V8
Phone: (604)775-9349 Fax: (604)775-6645
Email: Bradley.Klaver@pwgsc-tpsgc.gc.ca

REPORT INFORMATION (if differs from invoice):
Company Name: #26621 SLR CONSULTING (CANADA) LTD
Contact Name: Aaron Haegele
Address: 6-40 CADILLAC AVENUE, VICTORIA BC V8Z 1T2
Phone: (604)475-9595 Fax: (250)475-9596
Email: ahaegele@slrconsulting.com; ckozley@slrconsulti

PROJECT INFORMATION:
Quotation #: B30720
P.O. #: 700261278
Project #: 205.03833.00000
Project Name:
Site #: Colwood 43
Sampled By: C.K

Laboratory Use Only:
MAXXAM JOB #: B362197
BOTTLE ORDER #: 404051
CHAIN OF CUSTODY #: C404051-12-01
PROJECT MANAGER: Crystal Ireland

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other _____

SPECIAL INSTRUCTIONS:

TURNAROUND TIME (TAT) REQUIRED:
PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5 working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. ☒
Job Specific Rush TAT (if applies to entire submission): 1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____ ☐
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (+ 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals	AB Class II Landfill Criteria		# of Bottles	Comments
1	G49296	SP-13	13/07/17		Soil										X		2	
2	G49297	SP-14	13/07/17		Soil										X		2	
3	G49298	SP-15	13/07/17		Soil		X	X					X				2	
4	G49299	SP-16	13/07/17		Soil		X	X					X				2	
5	G49300	SP-17	13/07/17		Soil		X	X					X				2	
6	G49301	SP-18	13/07/17		Soil		X	X					X				2	
7	G49302	SP-19	13/07/17		Soil		X	X					X				2	
8	G49303	SP-20	13/07/17		Soil		X	X					X				2	B362197
9	G49304	SP-21	13/07/17		Soil		X	X					X				2	
10	G49305	SP-22	13/07/17		Soil		X	X					X				2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Richard Plaudl	13/07/19	16:00	Eric Y. ERIC YAN	2013/07/20	09:10	0	☐	5.6.6	☐ Yes ☐ No

*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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(~~SP-23 to SP-46~~ ~~CS-15 to 17~~)

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION		REPORT INFORMATION (if differs from invoice)		PROJECT INFORMATION		Laboratory Use Only	
Company Name	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name	#20621 SLR CONSULTING (CANADA) LTD	Quotation #	B30720	MAXXAM JOB #	BOTTLE ORDER #
Contact Name	Bradley Klaver	Contact Name	Aaron Haegele	P.O. #	700261278	B362197	
Address	641- 800 BURRARD STREET	Address	6-40 CADILLAC AVENUE	Project #	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name		CHAIN OF CUSTODY #	PROJECT MANAGER
Phone	(604)775-9349 Fax (604)775-6645	Phone	(604)475-9595 Fax (250)475-9596	Site #	Colwood 43	C#040601-04-01	Crystal Ireland
Email	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By	CK		

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required _____
Rush Confirmation Number: _____

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	G49306	SP-23	13/07/18		Soil		X	X					X				2	
2	G49307	SP-24	13/07/18		Soil		X	X					X				2	
3	G49308	SP-25	13/07/18		Soil		X	X					X				2	
4	G49309	SP-26	13/07/18		Soil		X	X					X				2	
5	G49310	SP-27	13/07/18		Soil		X	X					X				2	
6	G49311	SP-28	13/07/18		Soil		X	X					X				2	
7	G49312	SP-29	13/07/18		Soil		X	X					X				2	
8	G49313	SP-30	13/07/18		Soil		X	X					X				2	
9	G49314	SP-31	13/07/18		Soil		X	X					X				2	B362197
10	G49315	SP-32	13/07/18		Soil		X	X					X				2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
[illegible] Pakoudbude	13/07/19	10:00	Eric Z. ERIC YAN	2013/07/20	09:10	0	☐	5.6.6	☐ N/A ☐ No

Page 32 of 35

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION		REPORT INFORMATION (if differs from invoice)		PROJECT INFORMATION		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278	B362197	402051
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHG0051-08-01	Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6845	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:	CK		

REGULATORY CRITERIA:
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

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Regular (Standard) TAT: ☒
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Job Specific Rush TAT (if applies to entire submission) ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	GY9328	SP-43	13/07/19		Soil		X	X					X				2	
2	GY9329	SP-44	13/07/19		Soil		X	X					X				2	
3	GY9330	SP-45	13/07/19		Soil		X	X					X				2	
4	GY9331	SP-46	13/07/19		Soil		X	X					X				2	
5	~~GY9332~~																~~2~~	
6	GY9332	CS-07	13/07/17		Soil		X	X									2	
7	GY9333	CS-08	13/07/17		Soil		X	X									2	
8	GY9334	CS-09	13/07/17		Soil		X	X									2	
9	GY9335	CS-10	13/07/17		Soil		X	X									2	B362197
10	GY9336	CS-11	13/07/17		Soil		X	X									2.	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Richard Pauli	13/07/19	16:20	Eric Y ERIC YAN	2013/07/20	09:10	0	☐	5, 6, 6	☐ N/A ☐ No

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278	B362197	402051
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:			
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43	C4K051-07-01	Crystal Ireland
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsult	Sampled By:	CK		

REGULATORY CRITERIA:
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- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

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Job Specific Rush TAT (if applies to entire submission) ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

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ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample Location Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	G49342	CS-12	13/07/17		Soil		X	X									2	
2	G49343	CS-13	13/07/17		Soil		X	X									2	
3	G49344	CS-14	13/07/17		Soil		X	X									2	
4	G49345	CS-15	13/07/17		Soil		X	X									2	
5	G49346	CS-16	13/07/17		Soil		X	X									2	
6	G49347	CS-17	13/07/17		Soil		X	X									2	
7																		
8																		
9																		
10																		

B362197

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Dan C. Richard Hurd	13/07/19	10:00	Eric Y ERIC YAN	2013/07/20	09:10	0	☐	5.6.6	☐ N/A ☐ No

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26821 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #: B362197	BOTTLE ORDER #: 404001
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #: C#404951-05-01	PROJECT MANAGER: Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-8696	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozey@slrconsulti	Sampled By:	CK		

REGULATORY CRITERIA:
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1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME/BCSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	GY9316	SP-33	13/07/18		Soil		X	X					X				2	
2	GY9317	SP-34	13/07/18		Soil		X	X					X				2	
3	GY9318	SP-35	13/07/18		Soil		X	X					X				2	
4	GY9319	SP-36	13/07/18		Soil		X	X					X				2	
5	GY9320	SP-37	13/07/18		Soil		X	X					X				2	
6	GY9321	SP-38	13/07/19		Soil		X	X					X				2	
7	GY9322	SP-39	13/07/19		Soil		X	X					X				2	
8	GY9323	SP-40	13/07/19		Soil		X	X					X				2	
9	GY9324	SP-41	13/07/19		Soil		X	X					X				2	B362197
10	GY9325	SP-42	13/07/19		Soil		X	X					X				2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Richard Pardo	13/07/19	1620	Eric Z ERIC YAN	2013/07/20	09:10	0	☐	5, 6, 6	☐ Yes ☐ No

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Your P.O. #: 700261278
Your Project #: 205.03633.00000
Site#: Colwood 43
Site Location: COLWOOD 43
Your C.O.C. #: 40495110, 40495111, 40495106, 40495109, 40495114

Attention: Aaron Haegele
SLR CONSULTING (CANADA) LTD
6-40 CADILLAC AVENUE
VICTORIA, BC
CANADA V8Z 1T2

Report Date: 2013/08/02

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B364544
Received: 2013/07/26, 08:00

Sample Matrix: Soil
Samples Received: 49

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	20	2013/07/29	2013/07/29	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	9	2013/07/30	2013/07/30	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	20	2013/07/30	2013/07/31	BBY6SOP-00011	SM-4500-Cl-
Soluble Chloride Ion	20	N/A	2013/07/30	BBY WI-00033	Calculated Parameter
Soluble Chloride Ion	29	N/A	2013/07/31	BBY WI-00033	Calculated Parameter
Elements by ICPMS (total)	10	2013/07/29	2013/07/29	BBY7SOP-00004	BCMOE-SALM
Elements by ICPMS (total)	39	2013/07/29	2013/07/30	BBY7SOP-00004	BCMOE-SALM
Moisture	9	N/A	2013/07/29	BBY8SOP-00017	Ont MOE -E 3139
Moisture	40	N/A	2013/07/30	BBY8SOP-00017	Ont MOE -E 3139
Soluble Sodium Ion	20	N/A	2013/07/29	BBY WI-00033	Calculated Parameter
Soluble Sodium Ion	27	N/A	2013/07/31	BBY WI-00033	Calculated Parameter
Soluble Sodium Ion	2	N/A	2013/08/02	BBY WI-00033	Calculated Parameter
PAH in Soil by GC/MS (SIM) - CCME	5	2013/07/28	2013/07/29	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/07/28	2013/07/30	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	12	2013/07/29	2013/07/29	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	28	2013/07/29	2013/07/30	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/07/30	2013/07/31	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	39	N/A	2013/07/30	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	10	N/A	2013/07/31	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	39	N/A	2013/07/30	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	10	N/A	2013/07/31	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	20	2013/07/29	2013/07/29	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	29	2013/07/30	2013/07/30	BBY6SOP-00028	Carter, SSMA 16.2
Saturated Paste	20	2013/07/29	2013/07/29	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	27	2013/07/30	2013/07/30	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	2	2013/08/02	2013/08/02	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Cations (Ca,K,Mg,Na,S)	20	N/A	2013/07/29	BBY7SOP-00018	Carter Method 5.2
Soluble Cations (Ca,K,Mg,Na,S)	29	N/A	2013/07/30	BBY7SOP-00018	Carter Method 5.2

* Results relate only to the items tested.

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Sampler Initials: MB

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Crystal Ireland, B.Sc., Account Specialist
Email: CIreland@maxxam.ca
Phone# (604) 638-5016

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

PHYSICAL TESTING (SOIL)

Maxxam ID		HA3686	HA3687	HA3688	HA3689	HA3690	HA3691		HA3692	HA3693	HA3694		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-47**	**SP-48**	**SP-49**	**SP-50**	**SP-51**	**SP-52**	**QC Batch**	**SP-53**	**SP-54**	**SP-55**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	10	12	14	11	14	8.1	7028299	15	10	14	0.30	7028276

Maxxam ID		HA3695	HA3700	HA3701		HA3702	HA3703	HA3704	HA3705		HA3706		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-56**	**SP-56B**	**SP-57**	**QC Batch**	**SP-58**	**SP-59**	**SP-60**	**SP-61**	**QC Batch**	**SP-62**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	13	13	8.5	7028299	16	7.1	8.5	8.3	7028276	9.3	0.30	7028298

Maxxam ID		HA3707	HA3708		HA3709		HA3715		HA3716	HA3717	HA3718		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-62B**	**SP-63**	**QC Batch**	**SP-64**	**QC Batch**	**SP-65**	**QC Batch**	**SP-66**	**SP-67**	**SP-67B**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	8.9	6.9	7028298	8.5	7028299	4.0	7028298	7.5	6.7	6.7	0.30	7028299

Maxxam ID		HA3719		HA3720	HA3721		HA3722		HA3723	HA3724		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-68**	**QC Batch**	**SP-69**	**SP-70**	**QC Batch**	**SP-71**	**QC Batch**	**SP-72**	**SP-72B**	**RDL**	**QC Batch**
Physical Properties												
Moisture	%	23	7028298	23	22	7028299	21	7028298	19	19	0.30	7028299

Maxxam ID		HA3725		HA3726		HA3727	HA3728		HA3729		HA3730		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-73**	**QC Batch**	**SP-74**	**QC Batch**	**SP-75**	**SP-76**	**QC Batch**	**SP-77**	**QC Batch**	**SP-77B**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	15	7028298	14	7028299	19	25	7028298	18	7028299	16	0.30	7028276

RDL = Reportable Detection Limit

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Sampler Initials: MB

PHYSICAL TESTING (SOIL)

Maxxam ID		HA3731		HA3732		HA3733		HA3734	HA3735	HA3736	HA3737		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00		
	UNITS	**SP-78**	**QC Batch**	**SP-79**	**QC Batch**	**SP-80**	**QC Batch**	**SP-81**	**SP-81B**	**SP-82**	**SP-83**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	19	7028298	25	7028299	14	7028276	12	11	23	30	0.30	7028298

Maxxam ID		HA3738	HA3739	HA3740	HA3741	HA3742	HA3743		
Sampling Date		2013/07/25 12:00	2013/07/25 12:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/25 15:00		
	UNITS	**SP-84**	**SP-84B**	**CS-21**	**CS-22**	**CS-23**	**CS-24**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	28	30	38	27	8.0	11	0.30	7028298

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CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3686	HA3687		HA3688		HA3689		HA3690		HA3691		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-47**	**SP-48**	**QC Batch**	**SP-49**	**QC Batch**	**SP-50**	**QC Batch**	**SP-51**	**QC Batch**	**SP-52**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.06	9.05	7028594	8.05	7028505	9.26	7028594	8.28	7028505	8.39	0.010	7028594
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	19600	15600	7028591	21900	7028502	13700	7028591	20900	7028502	18500	100	7028591
Total Antimony (Sb)	mg/kg	1.59	2.80	7028591	87.5	7028502	13.3	7028591	1.86	7028502	1.20	0.10	7028591
Total Arsenic (As)	mg/kg	13.3	10.1	7028591	155	7028502	34.3	7028591	9.61	7028502	25.1	0.50	7028591
Total Barium (Ba)	mg/kg	102	148	7028591	121	7028502	86.2	7028591	76.0	7028502	100	0.10	7028591
Total Beryllium (Be)	mg/kg	<0.40	<0.40	7028591	<0.40	7028502	<0.40	7028591	<0.40	7028502	<0.40	0.40	7028591
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	7028591	0.29	7028502	<0.10	7028591	<0.10	7028502	<0.10	0.10	7028591
Total Cadmium (Cd)	mg/kg	0.355	0.246	7028591	0.584	7028502	0.296	7028591	0.271	7028502	0.487	0.050	7028591
Total Calcium (Ca)	mg/kg	66600	112000	7028591	52100	7028502	89800	7028591	69700	7028502	110000	100	7028591
Total Chromium (Cr)	mg/kg	29.5	25.1	7028591	38.1	7028502	23.2	7028591	31.2	7028502	36.7	1.0	7028591
Total Cobalt (Co)	mg/kg	18.7	11.0	7028591	18.6	7028502	15.0	7028591	12.8	7028502	16.9	0.30	7028591
Total Copper (Cu)	mg/kg	168	52.4	7028591	160	7028502	55.4	7028591	40.2	7028502	53.5	0.50	7028591
Total Iron (Fe)	mg/kg	38000	23000	7028591	35700	7028502	21000	7028591	28500	7028502	27300	100	7028591
Total Lead (Pb)	mg/kg	29.3	18.8	7028591	127	7028502	47.5	7028591	19.3	7028502	17.8	0.10	7028591
Total Lithium (Li)	mg/kg	12.6	9.9	7028591	12.6	7028502	9.5	7028591	10.8	7028502	13.8	5.0	7028591
Total Magnesium (Mg)	mg/kg	10400	20800	7028591	10500	7028502	17100	7028591	11000	7028502	16900	100	7028591
Total Manganese (Mn)	mg/kg	592	451	7028591	532	7028502	533	7028591	515	7028502	562	0.20	7028591
Total Mercury (Hg)	mg/kg	0.058	0.062	7028591	0.075	7028502	0.077	7028591	0.053	7028502	0.154	0.050	7028591
Total Molybdenum (Mo)	mg/kg	7.17	2.48	7028591	4.68	7028502	2.89	7028591	1.59	7028502	6.47	0.10	7028591
Total Nickel (Ni)	mg/kg	22.2	18.8	7028591	27.5	7028502	20.4	7028591	22.9	7028502	30.6	0.80	7028591
Total Phosphorus (P)	mg/kg	1340	670	7028591	1520	7028502	1120	7028591	994	7028502	831	10	7028591
Total Potassium (K)	mg/kg	1050	591	7028591	1210	7028502	713	7028591	970	7028502	580	100	7028591
Total Selenium (Se)	mg/kg	<0.50	<0.50	7028591	<0.50	7028502	<0.50	7028591	<0.50	7028502	<0.50	0.50	7028591
Total Silver (Ag)	mg/kg	0.107	0.093	7028591	0.279	7028502	0.085	7028591	0.083	7028502	0.076	0.050	7028591
Total Sodium (Na)	mg/kg	1200	1150	7028591	1260	7028502	1380	7028591	1410	7028502	778	100	7028591
Total Strontium (Sr)	mg/kg	279	387	7028591	205	7028502	346	7028591	231	7028502	326	0.10	7028591
Total Thallium (Tl)	mg/kg	<0.050	<0.050	7028591	0.093	7028502	<0.050	7028591	<0.050	7028502	0.059	0.050	7028591
Total Tin (Sn)	mg/kg	0.82	1.22	7028591	12.4	7028502	2.94	7028591	0.85	7028502	1.30	0.10	7028591
Total Titanium (Ti)	mg/kg	820	708	7028591	756	7028502	566	7028591	842	7028502	747	1.0	7028591
Total Uranium (U)	mg/kg	0.982	1.30	7028591	0.820	7028502	1.26	7028591	0.904	7028502	2.09	0.050	7028591
Total Vanadium (V)	mg/kg	68.4	52.1	7028591	63.8	7028502	47.3	7028591	70.0	7028502	57.8	2.0	7028591
Total Zinc (Zn)	mg/kg	600	127	7028591	601	7028502	158	7028591	77.0	7028502	119	1.0	7028591
Total Zirconium (Zr)	mg/kg	2.76	2.92	7028591	3.08	7028502	1.81	7028591	2.73	7028502	2.28	0.50	7028591

RDL = Reportable Detection Limit

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Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3692		HA3693		HA3694		HA3695	HA3700	HA3701		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-53**	**QC Batch**	**SP-54**	**QC Batch**	**SP-55**	**QC Batch**	**SP-56**	**SP-56B**	**SP-57**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.05	7028594	8.97	7028505	8.60	7028594	8.10	8.10	8.72	0.010	7028505
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	19200	7028591	17500	7028502	20700	7028591	22700	21700	22900	100	7028502
Total Antimony (Sb)	mg/kg	52.4	7028591	5.49	7028502	2.14	7028591	5.58	10.2	58.1	0.10	7028502
Total Arsenic (As)	mg/kg	96.1	7028591	18.2	7028502	20.2	7028591	15.5	20.5	148	0.50	7028502
Total Barium (Ba)	mg/kg	127	7028591	202	7028502	89.3	7028591	105	114	120	0.10	7028502
Total Beryllium (Be)	mg/kg	<0.40	7028591	<0.40	7028502	<0.40	7028591	<0.40	<0.40	<0.40	0.40	7028502
Total Bismuth (Bi)	mg/kg	0.18	7028591	0.11	7028502	<0.10	7028591	<0.10	<0.10	0.25	0.10	7028502
Total Cadmium (Cd)	mg/kg	0.602	7028591	0.378	7028502	0.273	7028591	0.376	0.318	0.522	0.050	7028502
Total Calcium (Ca)	mg/kg	58400	7028591	122000	7028502	83700	7028591	66900	61700	82700	100	7028502
Total Chromium (Cr)	mg/kg	33.1	7028591	24.3	7028502	35.4	7028591	32.5	30.8	35.3	1.0	7028502
Total Cobalt (Co)	mg/kg	16.1	7028591	15.2	7028502	15.3	7028591	12.9	12.9	20.6	0.30	7028502
Total Copper (Cu)	mg/kg	92.5	7028591	69.3	7028502	46.1	7028591	43.9	51.4	128	0.50	7028502
Total Iron (Fe)	mg/kg	30000	7028591	34600	7028502	29300	7028591	30400	29300	38800	100	7028502
Total Lead (Pb)	mg/kg	85.8	7028591	59.9	7028502	22.1	7028591	21.8	29.9	118	0.10	7028502
Total Lithium (Li)	mg/kg	13.3	7028591	9.2	7028502	14.4	7028591	14.0	13.0	14.8	5.0	7028502
Total Magnesium (Mg)	mg/kg	10100	7028591	20500	7028502	16000	7028591	13400	11700	14500	100	7028502
Total Manganese (Mn)	mg/kg	626	7028591	539	7028502	529	7028591	543	553	634	0.20	7028502
Total Mercury (Hg)	mg/kg	0.075	7028591	0.129	7028502	0.086	7028591	0.112	0.075	0.082	0.050	7028502
Total Molybdenum (Mo)	mg/kg	3.34	7028591	4.37	7028502	4.22	7028591	2.90	2.23	5.95	0.10	7028502
Total Nickel (Ni)	mg/kg	27.0	7028591	23.8	7028502	26.2	7028591	25.2	24.5	28.1	0.80	7028502
Total Phosphorus (P)	mg/kg	3500	7028591	1180	7028502	944	7028591	2060	1720	2320	10	7028502
Total Potassium (K)	mg/kg	1100	7028591	862	7028502	764	7028591	1000	964	1190	100	7028502
Total Selenium (Se)	mg/kg	<0.50	7028591	<0.50	7028502	<0.50	7028591	<0.50	<0.50	<0.50	0.50	7028502
Total Silver (Ag)	mg/kg	0.189	7028591	0.097	7028502	0.098	7028591	0.092	0.090	0.182	0.050	7028502
Total Sodium (Na)	mg/kg	1590	7028591	895	7028502	1500	7028591	1280	1280	1740	100	7028502
Total Strontium (Sr)	mg/kg	308	7028591	435	7028502	333	7028591	255	283	332	0.10	7028502
Total Thallium (Tl)	mg/kg	0.072	7028591	0.054	7028502	<0.050	7028591	0.054	0.057	0.105	0.050	7028502
Total Tin (Sn)	mg/kg	7.16	7028591	2.28	7028502	1.25	7028591	1.75	2.24	11.1	0.10	7028502
Total Titanium (Ti)	mg/kg	706	7028591	704	7028502	823	7028591	688	645	739	1.0	7028502
Total Uranium (U)	mg/kg	0.979	7028591	1.81	7028502	1.50	7028591	0.981	0.884	1.35	0.050	7028502
Total Vanadium (V)	mg/kg	63.1	7028591	56.7	7028502	67.3	7028591	67.7	63.1	66.5	2.0	7028502
Total Zinc (Zn)	mg/kg	373	7028591	136	7028502	92.1	7028591	100	132	503	1.0	7028502
Total Zirconium (Zr)	mg/kg	1.79	7028591	3.29	7028502	2.96	7028591	2.42	2.42	2.34	0.50	7028502

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CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3702	HA3703	HA3704	HA3705		HA3706	HA3707	HA3708	HA3709		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-58**	**SP-59**	**SP-60**	**SP-61**	**QC Batch**	**SP-62**	**SP-62B**	**SP-63**	**SP-64**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.12	7.96	8.81	8.12	7028594	8.04	8.10	8.00	8.18	0.010	7028505
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	18300	14000	13900	15500	7028591	16400	16900	16700	18300	100	7028502
Total Antimony (Sb)	mg/kg	18.2	1.63	1.62	1.17	7028591	10.9	7.61	4.44	5.13	0.10	7028502
Total Arsenic (As)	mg/kg	38.1	13.4	8.59	13.5	7028591	27.9	18.9	16.3	19.3	0.50	7028502
Total Barium (Ba)	mg/kg	94.7	67.3	36.5	64.3	7028591	53.8	55.0	47.5	44.3	0.10	7028502
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	7028591	<0.40	<0.40	<0.40	<0.40	0.40	7028502
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	7028591	<0.10	<0.10	<0.10	<0.10	0.10	7028502
Total Cadmium (Cd)	mg/kg	0.386	0.347	0.279	0.343	7028591	0.430	0.319	0.303	0.340	0.050	7028502
Total Calcium (Ca)	mg/kg	84400	99900	108000	141000	7028591	127000	116000	96000	129000	100	7028502
Total Chromium (Cr)	mg/kg	33.7	32.0	27.0	27.3	7028591	23.3	28.4	27.2	27.8	1.0	7028502
Total Cobalt (Co)	mg/kg	12.5	12.4	10.9	13.7	7028591	13.3	13.2	14.0	14.3	0.30	7028502
Total Copper (Cu)	mg/kg	64.0	50.0	35.8	37.1	7028591	51.1	43.5	60.2	45.6	0.50	7028502
Total Iron (Fe)	mg/kg	27100	28400	22400	26200	7028591	32100	26200	30200	27200	100	7028502
Total Lead (Pb)	mg/kg	43.1	18.1	12.6	14.8	7028591	29.1	27.1	18.7	16.5	0.10	7028502
Total Lithium (Li)	mg/kg	11.8	10.1	9.9	11.7	7028591	10.2	10.5	10.7	11.3	5.0	7028502
Total Magnesium (Mg)	mg/kg	10900	11800	11600	12100	7028591	12000	12100	13900	16600	100	7028502
Total Manganese (Mn)	mg/kg	529	497	382	432	7028591	504	501	572	474	0.20	7028502
Total Mercury (Hg)	mg/kg	0.059	0.106	0.108	0.289	7028591	0.183	0.169	0.191	0.280	0.050	7028502
Total Molybdenum (Mo)	mg/kg	2.33	4.65	2.81	5.06	7028591	5.66	5.44	9.33	10.2	0.10	7028502
Total Nickel (Ni)	mg/kg	24.7	26.8	22.1	24.6	7028591	22.8	22.6	25.4	24.4	0.80	7028502
Total Phosphorus (P)	mg/kg	1800	888	851	666	7028591	925	965	789	790	10	7028502
Total Potassium (K)	mg/kg	813	614	390	506	7028591	555	514	506	534	100	7028502
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	7028591	<0.50	<0.50	<0.50	<0.50	0.50	7028502
Total Silver (Ag)	mg/kg	0.128	0.064	<0.050	0.063	7028591	0.072	0.069	0.054	0.072	0.050	7028502
Total Sodium (Na)	mg/kg	1280	917	443	600	7028591	528	510	765	1320	100	7028502
Total Strontium (Sr)	mg/kg	377	392	344	435	7028591	381	327	295	384	0.10	7028502
Total Thallium (Tl)	mg/kg	<0.050	<0.050	<0.050	0.078	7028591	<0.050	<0.050	<0.050	<0.050	0.050	7028502
Total Tin (Sn)	mg/kg	7.82	1.19	0.63	0.56	7028591	2.14	1.47	7.43	1.24	0.10	7028502
Total Titanium (Ti)	mg/kg	678	698	629	739	7028591	654	756	649	665	1.0	7028502
Total Uranium (U)	mg/kg	1.05	1.72	1.46	2.65	7028591	2.65	2.09	2.14	2.72	0.050	7028502
Total Vanadium (V)	mg/kg	63.4	49.3	45.6	50.0	7028591	50.9	54.0	50.1	53.8	2.0	7028502
Total Zinc (Zn)	mg/kg	207	92.4	67.7	60.5	7028591	111	97.3	83.0	81.2	1.0	7028502
Total Zirconium (Zr)	mg/kg	1.82	2.52	1.45	2.34	7028591	1.46	2.25	2.48	2.01	0.50	7028502

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3715	HA3716	HA3717	HA3718	HA3719	HA3720	HA3721		HA3722		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-65**	**SP-66**	**SP-67**	**SP-67B**	**SP-68**	**SP-69**	**SP-70**	**QC Batch**	**SP-71**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.14	8.02	8.10	8.07	9.39	9.75	9.39	7028690	9.43	0.010	7028594
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	14800	16300	18900	15300	11500	13800	12800	7028683	11100	100	7028591
Total Antimony (Sb)	mg/kg	9.94	7.79	11.3	5.99	9.00	3.07	5.26	7028683	2.16	0.10	7028591
Total Arsenic (As)	mg/kg	27.1	20.2	29.0	15.5	21.0	9.27	11.0	7028683	8.46	0.50	7028591
Total Barium (Ba)	mg/kg	77.1	74.8	64.4	75.3	81.6	87.2	95.9	7028683	77.5	0.10	7028591
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	7028683	<0.40	0.40	7028591
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	7028683	<0.10	0.10	7028591
Total Cadmium (Cd)	mg/kg	0.358	0.413	0.453	0.311	0.265	0.231	0.333	7028683	0.241	0.050	7028591
Total Calcium (Ca)	mg/kg	125000	99100	120000	99500	125000	113000	103000	7028683	130000	100	7028591
Total Chromium (Cr)	mg/kg	23.2	25.8	32.3	22.9	16.4	21.8	21.0	7028683	19.4	1.0	7028591
Total Cobalt (Co)	mg/kg	10.4	13.4	17.1	13.3	8.02	8.43	7.98	7028683	8.07	0.30	7028591
Total Copper (Cu)	mg/kg	57.1	55.0	57.9	46.1	75.2	41.6	69.4	7028683	53.3	0.50	7028591
Total Iron (Fe)	mg/kg	21700	24900	29500	24100	18300	17600	18300	7028683	19200	100	7028591
Total Lead (Pb)	mg/kg	22.7	50.8	30.5	19.5	59.5	44.9	47.5	7028683	37.8	0.10	7028591
Total Lithium (Li)	mg/kg	10.0	11.2	12.9	12.2	7.4	9.5	8.9	7028683	7.4	5.0	7028591
Total Magnesium (Mg)	mg/kg	10300	10200	12300	11200	46900	43000	36900	7028683	34100	100	7028591
Total Manganese (Mn)	mg/kg	420	522	626	469	388	450	387	7028683	401	0.20	7028591
Total Mercury (Hg)	mg/kg	0.225	0.400	0.167	0.128	<0.050	0.068	0.057	7028683	<0.050	0.050	7028591
Total Molybdenum (Mo)	mg/kg	6.97	6.05	8.50	5.19	2.29	1.76	1.82	7028683	1.50	0.10	7028591
Total Nickel (Ni)	mg/kg	21.0	23.6	29.6	22.9	13.6	16.4	15.2	7028683	14.5	0.80	7028591
Total Phosphorus (P)	mg/kg	746	1800	1530	1110	491	642	583	7028683	497	10	7028591
Total Potassium (K)	mg/kg	478	558	619	470	619	753	701	7028683	633	100	7028591
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7028683	<0.50	0.50	7028591
Total Silver (Ag)	mg/kg	0.057	0.098	0.088	0.067	0.075	0.060	0.068	7028683	0.068	0.050	7028591
Total Sodium (Na)	mg/kg	260	620	594	491	3840	2900	2430	7028683	2600	100	7043699
Total Strontium (Sr)	mg/kg	374	455	406	391	529	494	469	7028683	516	0.10	7028591
Total Thallium (Tl)	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	7028683	<0.050	0.050	7028591
Total Tin (Sn)	mg/kg	1.44	1.66	1.92	1.26	3.44	1.66	6.48	7028683	1.39	0.10	7028591
Total Titanium (Ti)	mg/kg	824	857	987	718	605	722	729	7028683	635	1.0	7028591
Total Uranium (U)	mg/kg	2.64	2.08	2.06	1.56	1.75	1.77	1.48	7028683	1.60	0.050	7028591
Total Vanadium (V)	mg/kg	50.0	55.5	63.1	50.8	43.0	50.1	47.5	7028683	41.9	2.0	7028591
Total Zinc (Zn)	mg/kg	99.8	115	129	88.9	145	63.2	194	7028683	109	1.0	7028591
Total Zirconium (Zr)	mg/kg	2.41	1.62	2.35	1.58	2.64	2.93	2.53	7028683	2.80	0.50	7028591

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3723		HA3724	HA3725		HA3726		HA3727		HA3728		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00	2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-72**	**QC Batch**	**SP-72B**	**SP-73**	**QC Batch**	**SP-74**	**QC Batch**	**SP-75**	**QC Batch**	**SP-76**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	9.38	7028594	9.39	9.01	7028594	8.92	7028690	9.20	7028594	9.24	0.010	7028690
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	13700	7028591	11600	14500	7028591	17900	7028683	11900	7028591	10500	100	7028683
Total Antimony (Sb)	mg/kg	3.22	7028591	6.29	11.6	7028591	3.55	7028683	1.21	7028591	0.63	0.10	7028683
Total Arsenic (As)	mg/kg	8.62	7028591	11.8	20.9	7028591	10.2	7028683	5.72	7028591	5.46	0.50	7028683
Total Barium (Ba)	mg/kg	79.4	7028591	75.8	115	7028591	82.4	7028683	69.9	7028591	98.0	0.10	7028683
Total Beryllium (Be)	mg/kg	<0.40	7028591	<0.40	<0.40	7028591	<0.40	7028683	<0.40	7028591	<0.40	0.40	7028683
Total Bismuth (Bi)	mg/kg	<0.10	7028591	<0.10	<0.10	7028591	<0.10	7028683	<0.10	7028591	<0.10	0.10	7028683
Total Cadmium (Cd)	mg/kg	0.219	7028591	0.258	0.327	7028591	0.205	7028683	0.252	7028591	0.300	0.050	7028683
Total Calcium (Ca)	mg/kg	117000	7028591	109000	63100	7028591	64100	7028683	74400	7028591	136000	100	7028683
Total Chromium (Cr)	mg/kg	21.8	7028591	18.4	24.7	7028591	30.0	7028683	18.1	7028591	22.5	1.0	7028683
Total Cobalt (Co)	mg/kg	9.35	7028591	8.97	11.8	7028591	11.5	7028683	8.56	7028591	6.96	0.30	7028683
Total Copper (Cu)	mg/kg	60.3	7028591	63.3	101	7028591	50.7	7028683	41.2	7028591	25.3	0.50	7028683
Total Iron (Fe)	mg/kg	21900	7028591	16300	25800	7028591	25200	7028683	20100	7028591	14900	100	7028683
Total Lead (Pb)	mg/kg	31.9	7028591	50.9	45.2	7028591	24.9	7028683	43.4	7028591	129	0.10	7028683
Total Lithium (Li)	mg/kg	8.2	7028591	7.1	9.2	7028591	11.4	7028683	9.2	7028591	10.2	5.0	7028683
Total Magnesium (Mg)	mg/kg	30600	7028591	31600	22500	7028591	17400	7028683	24500	7028591	32600	100	7028683
Total Manganese (Mn)	mg/kg	432	7028591	399	453	7028591	476	7028683	387	7028591	340	0.20	7028683
Total Mercury (Hg)	mg/kg	<0.050	7028591	0.065	0.056	7028591	<0.050	7028683	0.068	7028591	0.109	0.050	7028683
Total Molybdenum (Mo)	mg/kg	1.92	7028591	1.36	1.93	7028591	1.18	7028683	2.36	7028591	5.50	0.10	7028683
Total Nickel (Ni)	mg/kg	16.2	7028591	14.7	20.6	7028591	23.0	7028683	15.3	7028591	12.7	0.80	7028683
Total Phosphorus (P)	mg/kg	549	7028591	545	607	7028591	863	7028683	633	7028591	594	10	7028683
Total Potassium (K)	mg/kg	721	7028591	581	742	7028591	831	7028683	687	7028591	944	100	7028683
Total Selenium (Se)	mg/kg	<0.50	7028591	<0.50	<0.50	7028591	<0.50	7028683	<0.50	7028591	<0.50	0.50	7028683
Total Silver (Ag)	mg/kg	0.075	7028591	0.061	0.095	7028591	0.057	7028683	0.063	7028591	<0.050	0.050	7028683
Total Sodium (Na)	mg/kg	2420	7043699	2150	2060	7028591	1510	7028683	4580	7028591	8650	100	7028683
Total Strontium (Sr)	mg/kg	499	7028591	444	262	7028591	284	7028683	362	7028591	790	0.10	7028683
Total Thallium (Tl)	mg/kg	<0.050	7028591	<0.050	<0.050	7028591	<0.050	7028683	<0.050	7028591	<0.050	0.050	7028683
Total Tin (Sn)	mg/kg	1.38	7028591	2.63	3.10	7028591	1.62	7028683	1.76	7028591	3.41	0.10	7028683
Total Titanium (Ti)	mg/kg	738	7028591	648	843	7028591	900	7028683	711	7028591	593	1.0	7028683
Total Uranium (U)	mg/kg	1.58	7028591	1.53	0.978	7028591	0.853	7028683	1.29	7028591	2.31	0.050	7028683
Total Vanadium (V)	mg/kg	49.3	7028591	43.3	57.2	7028591	66.3	7028683	50.0	7028591	39.0	2.0	7028683
Total Zinc (Zn)	mg/kg	123	7028591	93.7	315	7028591	137	7028683	93.3	7028591	45.6	1.0	7028683
Total Zirconium (Zr)	mg/kg	3.42	7028591	2.44	3.23	7028591	2.70	7028683	3.28	7028591	3.12	0.50	7028683

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3729		HA3730		HA3731	HA3732		HA3733		HA3734		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-77**	**QC Batch**	**SP-77B**	**QC Batch**	**SP-78**	**SP-79**	**QC Batch**	**SP-80**	**QC Batch**	**SP-81**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	9.14	7028594	9.12	7028690	8.93	9.28	7028594	9.28	7028690	9.35	0.010	7028594
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	13200	7028591	14200	7028683	20300	12200	7028591	14000	7028683	13500	100	7028591
Total Antimony (Sb)	mg/kg	0.58	7028591	0.57	7028683	5.54	2.55	7028591	1.10	7028683	0.57	0.10	7028591
Total Arsenic (As)	mg/kg	6.29	7028591	5.19	7028683	18.8	7.68	7028591	5.17	7028683	3.86	0.50	7028591
Total Barium (Ba)	mg/kg	72.5	7028591	68.5	7028683	86.1	64.6	7028591	51.1	7028683	52.4	0.10	7028591
Total Beryllium (Be)	mg/kg	<0.40	7028591	<0.40	7028683	<0.40	<0.40	7028591	<0.40	7028683	<0.40	0.40	7028591
Total Bismuth (Bi)	mg/kg	<0.10	7028591	<0.10	7028683	<0.10	<0.10	7028591	<0.10	7028683	<0.10	0.10	7028591
Total Cadmium (Cd)	mg/kg	0.269	7028591	0.222	7028683	0.314	0.263	7028591	0.220	7028683	0.231	0.050	7028591
Total Calcium (Ca)	mg/kg	97200	7028591	75400	7028683	74700	122000	7028591	71800	7028683	61900	100	7028591
Total Chromium (Cr)	mg/kg	20.6	7028591	20.8	7028683	31.5	22.1	7028591	21.8	7028683	22.0	1.0	7028591
Total Cobalt (Co)	mg/kg	8.91	7028591	10.1	7028683	12.4	9.09	7028591	9.04	7028683	9.87	0.30	7028591
Total Copper (Cu)	mg/kg	35.6	7028591	41.1	7028683	44.2	43.0	7028591	33.6	7028683	37.1	0.50	7028591
Total Iron (Fe)	mg/kg	20800	7028591	21700	7028683	24800	23300	7028591	23400	7028683	22300	100	7028591
Total Lead (Pb)	mg/kg	40.2	7028591	33.6	7028683	34.4	50.6	7028591	28.2	7028683	46.3	0.10	7028591
Total Lithium (Li)	mg/kg	10.4	7028591	10.6	7028683	16.5	9.1	7028591	10.3	7028683	9.1	5.0	7028591
Total Magnesium (Mg)	mg/kg	25000	7028591	20300	7028683	23100	29300	7028591	22600	7028683	24100	100	7028591
Total Manganese (Mn)	mg/kg	387	7028591	422	7028683	493	353	7028591	421	7028683	391	0.20	7028591
Total Mercury (Hg)	mg/kg	0.082	7028591	0.065	7028683	0.092	0.081	7028591	<0.050	7028683	0.062	0.050	7028591
Total Molybdenum (Mo)	mg/kg	3.17	7028591	2.20	7028683	3.50	1.52	7028591	1.17	7028683	0.90	0.10	7028591
Total Nickel (Ni)	mg/kg	16.3	7028591	18.4	7028683	23.4	16.2	7028591	17.6	7028683	17.0	0.80	7028591
Total Phosphorus (P)	mg/kg	669	7028591	634	7028683	749	471	7028591	572	7028683	549	10	7028591
Total Potassium (K)	mg/kg	731	7028591	751	7028683	859	696	7028591	680	7028683	517	100	7028591
Total Selenium (Se)	mg/kg	<0.50	7028591	<0.50	7028683	<0.50	<0.50	7028591	<0.50	7028683	<0.50	0.50	7028591
Total Silver (Ag)	mg/kg	0.085	7028591	0.067	7028683	0.089	0.061	7028591	0.054	7028683	0.054	0.050	7028591
Total Sodium (Na)	mg/kg	4670	7028591	3360	7028683	3150	4030	7028591	2510	7028683	1890	100	7028591
Total Strontium (Sr)	mg/kg	550	7028591	369	7028683	369	558	7028591	319	7028683	301	0.10	7028591
Total Thallium (Tl)	mg/kg	<0.050	7028591	<0.050	7028683	<0.050	<0.050	7028591	<0.050	7028683	<0.050	0.050	7028591
Total Tin (Sn)	mg/kg	1.73	7028591	1.44	7028683	2.14	1.81	7028591	1.03	7028683	0.91	0.10	7028591
Total Titanium (Ti)	mg/kg	752	7028591	914	7028683	898	690	7028591	897	7028683	807	1.0	7028591
Total Uranium (U)	mg/kg	1.57	7028591	1.27	7028683	1.36	1.39	7028591	1.02	7028683	0.796	0.050	7028591
Total Vanadium (V)	mg/kg	53.7	7028591	60.0	7028683	66.0	46.2	7028591	58.8	7028683	56.4	2.0	7028591
Total Zinc (Zn)	mg/kg	64.3	7028591	100	7028683	93.0	68.6	7028591	54.0	7028683	52.1	1.0	7028591
Total Zirconium (Zr)	mg/kg	3.04	7028591	3.62	7028683	3.36	3.37	7028591	3.53	7028683	3.24	0.50	7028591

RDL = Reportable Detection Limit

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Success Through Science®

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3735		HA3736	HA3737	HA3738	HA3739	HA3740	HA3741	HA3742		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-81B**	**QC Batch**	**SP-82**	**SP-83**	**SP-84**	**SP-84B**	**CS-21**	**CS-22**	**CS-23**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	9.35	7028594	9.39	9.64	9.62	9.60	9.62	8.47	7.96	0.010	7028690
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	15400	7028591	11700	11300	9440	10800	4210	5830	9290	100	7028683
Total Antimony (Sb)	mg/kg	0.48	7028591	4.00	2.61	11.1	17.9	0.31	0.85	1.49	0.10	7028683
Total Arsenic (As)	mg/kg	3.72	7028591	9.64	6.18	21.4	33.8	2.60	4.28	14.4	0.50	7028683
Total Barium (Ba)	mg/kg	41.0	7028591	47.5	53.2	58.8	61.7	48.2	108	86.8	0.10	7028683
Total Beryllium (Be)	mg/kg	<0.40	7028591	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7028683
Total Bismuth (Bi)	mg/kg	<0.10	7028591	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7028683
Total Cadmium (Cd)	mg/kg	0.213	7028591	0.323	0.333	0.325	0.300	0.167	0.151	0.292	0.050	7028683
Total Calcium (Ca)	mg/kg	26300	7028591	122000	114000	147000	118000	174000	167000	190000	100	7028683
Total Chromium (Cr)	mg/kg	26.4	7028591	20.2	19.1	14.4	18.7	2.8	6.5	12.8	1.0	7028683
Total Cobalt (Co)	mg/kg	11.6	7028591	8.98	7.24	6.44	8.11	1.30	2.71	6.52	0.30	7028683
Total Copper (Cu)	mg/kg	42.7	7028591	38.8	35.1	38.9	51.1	5.38	16.4	26.2	0.50	7028683
Total Iron (Fe)	mg/kg	25300	7028591	21500	14800	22800	22000	3800	8250	17500	100	7028683
Total Lead (Pb)	mg/kg	21.6	7028591	31.6	55.7	50.2	379	25.7	122	77.9	0.10	7028683
Total Lithium (Li)	mg/kg	9.8	7028591	6.8	8.5	6.9	7.2	<5.0	<5.0	6.5	5.0	7028683
Total Magnesium (Mg)	mg/kg	16500	7028591	52000	44900	74000	63400	52900	8310	6280	100	7028683
Total Manganese (Mn)	mg/kg	424	7028591	402	323	341	364	185	309	383	0.20	7028683
Total Mercury (Hg)	mg/kg	<0.050	7028591	0.051	0.070	<0.050	0.087	<0.050	<0.050	0.053	0.050	7028683
Total Molybdenum (Mo)	mg/kg	0.56	7028591	2.27	2.79	2.93	3.14	3.10	1.83	2.44	0.10	7028683
Total Nickel (Ni)	mg/kg	20.5	7028591	16.0	15.4	12.5	14.0	3.15	5.68	15.5	0.80	7028683
Total Phosphorus (P)	mg/kg	597	7028591	692	768	822	776	213	568	776	10	7028683
Total Potassium (K)	mg/kg	530	7028591	552	687	723	687	498	550	1010	100	7028683
Total Selenium (Se)	mg/kg	<0.50	7028591	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7028683
Total Silver (Ag)	mg/kg	0.059	7028591	0.061	<0.050	0.070	0.104	<0.050	<0.050	0.055	0.050	7028683
Total Sodium (Na)	mg/kg	1340	7028591	3710	4670	4570	4820	4370	4120	582	100	7028683
Total Strontium (Sr)	mg/kg	112	7028591	904	591	1010	764	961	577	501	0.10	7028683
Total Thallium (Tl)	mg/kg	<0.050	7028591	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7028683
Total Tin (Sn)	mg/kg	0.70	7028591	2.51	3.60	4.31	3.68	0.56	5.02	3.19	0.10	7028683
Total Titanium (Ti)	mg/kg	1040	7028591	739	727	526	622	222	283	383	1.0	7028683
Total Uranium (U)	mg/kg	0.524	7028591	2.25	1.74	2.62	2.10	3.66	1.63	1.64	0.050	7028683
Total Vanadium (V)	mg/kg	69.1	7028591	48.6	42.3	35.3	42.0	16.0	24.4	30.9	2.0	7028683
Total Zinc (Zn)	mg/kg	66.8	7028591	59.6	84.2	94.2	125	21.3	79.6	103	1.0	7028683
Total Zirconium (Zr)	mg/kg	3.57	7028591	2.66	2.82	1.82	2.13	2.06	1.02	1.25	0.50	7028683

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HA3743		
Sampling Date		2013/07/25 15:00		
	UNITS	**CS-24**	**RDL**	**QC Batch**
Physical Properties				
Soluble (2:1) pH	pH Units	9.37	0.010	7028690
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	13000	100	7028683
Total Antimony (Sb)	mg/kg	0.15	0.10	7028683
Total Arsenic (As)	mg/kg	2.89	0.50	7028683
Total Barium (Ba)	mg/kg	16.5	0.10	7028683
Total Beryllium (Be)	mg/kg	<0.40	0.40	7028683
Total Bismuth (Bi)	mg/kg	<0.10	0.10	7028683
Total Cadmium (Cd)	mg/kg	0.134	0.050	7028683
Total Calcium (Ca)	mg/kg	7590	100	7028683
Total Chromium (Cr)	mg/kg	18.5	1.0	7028683
Total Cobalt (Co)	mg/kg	8.37	0.30	7028683
Total Copper (Cu)	mg/kg	51.4	0.50	7028683
Total Iron (Fe)	mg/kg	19700	100	7028683
Total Lead (Pb)	mg/kg	3.30	0.10	7028683
Total Lithium (Li)	mg/kg	11.4	5.0	7028683
Total Magnesium (Mg)	mg/kg	7310	100	7028683
Total Manganese (Mn)	mg/kg	228	0.20	7028683
Total Mercury (Hg)	mg/kg	<0.050	0.050	7028683
Total Molybdenum (Mo)	mg/kg	0.34	0.10	7028683
Total Nickel (Ni)	mg/kg	13.5	0.80	7028683
Total Phosphorus (P)	mg/kg	391	10	7028683
Total Potassium (K)	mg/kg	920	100	7028683
Total Selenium (Se)	mg/kg	<0.50	0.50	7028683
Total Silver (Ag)	mg/kg	<0.050	0.050	7028683
Total Sodium (Na)	mg/kg	1280	100	7028683
Total Strontium (Sr)	mg/kg	27.1	0.10	7028683
Total Thallium (Tl)	mg/kg	<0.050	0.050	7028683
Total Tin (Sn)	mg/kg	0.25	0.10	7028683
Total Titanium (Ti)	mg/kg	1100	1.0	7028683
Total Uranium (U)	mg/kg	0.375	0.050	7028683
Total Vanadium (V)	mg/kg	59.6	2.0	7028683
Total Zinc (Zn)	mg/kg	34.8	1.0	7028683
Total Zirconium (Zr)	mg/kg	2.50	0.50	7028683

RDL = Reportable Detection Limit

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SLR CONSULTING (CANADA) LTD
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SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HA3686	HA3687		HA3688		HA3689		HA3690		HA3691		HA3692		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-47**	**SP-48**	**RDL**	**SP-49**	**RDL**	**SP-50**	**RDL**	**SP-51**	**RDL**	**SP-52**	**RDL**	**SP-53**	**RDL**	**QC Batch**
ANIONS															
Soluble Chloride (Cl)	mg/L	2520	2510	50	1660	5.0	1920	5.0	2370	50	1380	5.0	1780	5.0	7029887
Calculated Parameters															
Soluble Chloride (Cl)	mg/kg	1450	1440	29	1070	3.2	1510	3.9	1340	28	825	3.0	1170	3.3	7027831
Soluble Sodium (Na)	mg/kg	582	639	2.9	469	3.2	762	3.9	610	2.8	395	3.0	625	3.3	7027832
Soluble Parameters															
Saturation %	%	57.5	57.2	1.0	64.8	1.0	78.6	1.0	56.6	1.0	59.7	1.0	65.9	1.0	7028477
Wet Soluble Sodium (Na)	mg/L	1010	1120	5.0	725	5.0	971	5.0	1080	5.0	662	5.0	947	5.0	7029227

Maxxam ID		HA3693		HA3694		HA3695		HA3700		HA3701		HA3702		HA3703		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-54**	**RDL**	**SP-55**	**RDL**	**SP-56**	**RDL**	**SP-56B**	**RDL**	**SP-57**	**RDL**	**SP-58**	**RDL**	**SP-59**	**RDL**	**QC Batch**
ANIONS																
Soluble Chloride (Cl)	mg/L	1320	5.0	2770	50	1670	5.0	1470	5.0	2570	50	2090	50	1930	5.0	7029887
Calculated Parameters																
Soluble Chloride (Cl)	mg/kg	868	3.3	1790	32	975	2.9	958	3.3	1330	26	1370	33	1230	3.2	7027831
Soluble Sodium (Na)	mg/kg	337	3.3	834	3.2	449	2.9	452	3.3	586	2.6	649	3.3	546	3.2	7027832
Soluble Parameters																
Saturation %	%	65.8	1.0	64.7	1.0	58.3	1.0	65.2	1.0	51.9	1.0	65.7	1.0	64.0	1.0	7028477
Wet Soluble Sodium (Na)	mg/L	512	5.0	1290	5.0	770	5.0	694	5.0	1130	5.0	988	5.0	852	5.0	7029227

RDL = Reportable Detection Limit

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SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HA3704		HA3705		HA3706	HA3707		HA3708		HA3709		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-60**	**RDL**	**SP-61**	**RDL**	**SP-62**	**SP-62B**	**RDL**	**SP-63**	**RDL**	**SP-64**	**RDL**	**QC Batch**
ANIONS													
Soluble Chloride (Cl)	mg/L	1450	5.0	1490	5.0	992	1020	5.0	1700	5.0	2780	50	7029887
Calculated Parameters													
Soluble Chloride (Cl)	mg/kg	786	2.7	981	3.3	502	506	2.5	915	2.7	1530	27	7027831
Soluble Sodium (Na)	mg/kg	307	2.7	450	3.3	210	212	2.5	443	2.7	846	2.7	7027832
Soluble Parameters													
Saturation %	%	54.1	1.0	66.1	1.0	50.7	49.8	1.0	53.8	1.0	55.0	1.0	7028477
Wet Soluble Sodium (Na)	mg/L	566	5.0	682	5.0	415	425	5.0	822	5.0	1540	5.0	7029227

Maxxam ID		HA3715		HA3716		HA3717		HA3718		HA3719		HA3720	HA3721		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-65**	**RDL**	**SP-66**	**RDL**	**SP-67**	**RDL**	**SP-67B**	**RDL**	**SP-68**	**RDL**	**SP-69**	**SP-70**	**RDL**	**QC Batch**
ANIONS															
Soluble Chloride (Cl)	mg/L	411	5.0	1070	5.0	1030	5.0	885	5.0	9400	50	5950	5300	50	7035000
Calculated Parameters															
Soluble Chloride (Cl)	mg/kg	189	2.3	559	2.6	494	2.4	462	2.6	5750	31	3580	3150	30	7027831
Soluble Sodium (Na)	mg/kg	66.9	2.3	219	2.6	190	2.4	182	2.6	3020	3.1	1420	1300	3.0	7027832
Soluble Parameters															
Saturation %	%	45.9	1.0	52.1	1.0	48.1	1.0	52.2	1.0	61.2	1.0	60.2	59.4	1.0	7032368
Wet Soluble Sodium (Na)	mg/L	146	5.0	421	5.0	396	5.0	348	5.0	4940	5.0	2360	2180	5.0	7033029

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SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HA3722		HA3723			HA3724		HA3725		HA3726		HA3727		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00			2013/07/24 14:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-71**	**RDL**	**SP-72**	**RDL**	**QC Batch**	**SP-72B**	**RDL**	**SP-73**	**RDL**	**SP-74**	**RDL**	**SP-75**	**RDL**	**QC Batch**
ANIONS															
Soluble Chloride (Cl)	mg/L	10600	50	9990	50	7035000	5230	50	5790	50	3700	50	11300	50	7035000
Calculated Parameters															
Soluble Chloride (Cl)	mg/kg	6930	33	6770	34	7027831	3060	29	3190	28	2230	30	5170	23	7027831
Soluble Sodium (Na)	mg/kg	3580	3.3	3280	3.4	7042784	1200	2.9	1160	2.8	814	3.0	2530	2.3	7027832
Soluble Parameters															
Saturation %	%	65.7	1.0	67.8	1.0	7044705	58.6	1.0	55.1	1.0	60.3	1.0	45.7	1.0	7032368
Wet Soluble Sodium (Na)	mg/L	5450	5.0	4840	5.0	7033029	2050	5.0	2110	5.0	1350	5.0	5540	5.0	7033029

Maxxam ID		HA3728		HA3729		HA3730		HA3731		HA3732		HA3733		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-76**	**RDL**	**SP-77**	**RDL**	**SP-77B**	**RDL**	**SP-78**	**RDL**	**SP-79**	**RDL**	**SP-80**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	18000	50	10900	50	10200	50	7550	50	8480	50	6350	50	7035000
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	11100	31	5730	26	4860	24	3800	25	4500	27	2940	23	7027831
Soluble Sodium (Na)	mg/kg	5910	3.1	2830	2.6	2310	2.4	1790	2.5	2290	2.7	1490	2.3	7027832
Soluble Parameters														
Saturation %	%	61.6	1.0	52.7	1.0	47.8	1.0	50.4	1.0	53.0	1.0	46.3	1.0	7032368
Wet Soluble Sodium (Na)	mg/L	9590	5.0	5380	5.0	4830	5.0	3550	5.0	4320	5.0	3220	5.0	7033029

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Site Location: COLWOOD 43
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Sampler Initials: MB

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HA3734	HA3735		HA3736		HA3737		HA3738		
Sampling Date		2013/07/25 12:00	2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00		
	UNITS	**SP-81**	**SP-81B**	**RDL**	**SP-82**	**RDL**	**SP-83**	**RDL**	**SP-84**	**RDL**	**QC Batch**
ANIONS											
Soluble Chloride (Cl)	mg/L	4150	5440	50	8570	50	8270	50	8820	50	7035001
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	1760	2310	21	5120	30	5220	32	5250	30	7027831
Soluble Sodium (Na)	mg/kg	743	910	2.1	2740	3.0	2690	3.2	2710	3.0	7027832
Soluble Parameters											
Saturation %	%	42.4	42.4	1.0	59.7	1.0	63.1	1.0	59.6	1.0	7032402
Wet Soluble Sodium (Na)	mg/L	1750	2150	5.0	4590	5.0	4270	5.0	4550	5.0	7033030

Maxxam ID		HA3739		HA3740		HA3741		HA3742		HA3743		
Sampling Date		2013/07/25 12:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/25 15:00		
	UNITS	**SP-84B**	**RDL**	**CS-21**	**RDL**	**CS-22**	**RDL**	**CS-23**	**RDL**	**CS-24**	**RDL**	**QC Batch**
ANIONS												
Soluble Chloride (Cl)	mg/L	7520	50	9980	50	8570	50	341	5.0	1960	5.0	7035001
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	4620	31	7400	37	6200	36	323	4.7	555	1.4	7027831
Soluble Sodium (Na)	mg/kg	2430	3.1	3750	3.7	2900	3.6	76.7	4.7	323	1.4	7027832
Soluble Parameters												
Saturation %	%	61.5	1.0	74.1	1.0	72.4	1.0	94.5	1.0	28.3	1.0	7032402
Wet Soluble Sodium (Na)	mg/L	3950	5.0	5050	5.0	4000	5.0	81.1	5.0	1140	5.0	7033030

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Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3686		HA3687	HA3688		HA3689		HA3690		
Sampling Date		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-47**	**QC Batch**	**SP-48**	**SP-49**	**QC Batch**	**SP-50**	**QC Batch**	**SP-51**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	0.86	7027833	1.2	1.7	7027833	2.7	7027833	1.9	0.10	7027833
Benzo[a]pyrene equivalency	N/A	<0.10	7027833	<0.10	0.14	7027833	0.20	7027833	0.12	0.10	7027833
Polycyclic Aromatics											
Naphthalene	mg/kg	<0.010	7030655	<0.010	<0.010	7029615	0.022	7030655	<0.010	0.010	7029615
2-Methylnaphthalene	mg/kg	<0.020	7030655	<0.020	<0.020	7029615	<0.020	7030655	<0.020	0.020	7029615
Acenaphthylene	mg/kg	<0.0050	7030655	0.0072	0.011	7029615	0.011	7030655	0.0095	0.0050	7029615
Acenaphthene	mg/kg	<0.0050	7030655	<0.0050	0.0097	7029615	0.036	7030655	<0.0050	0.0050	7029615
Fluorene	mg/kg	<0.020	7030655	<0.020	<0.020	7029615	0.036	7030655	<0.020	0.020	7029615
Phenanthrene	mg/kg	0.035	7030655	0.037	0.12	7029615	0.27	7030655	0.030	0.020	7029615
Anthracene	mg/kg	0.0068	7030655	0.012	0.033	7029615	0.061	7030655	0.027	0.0040	7029615
Fluoranthene	mg/kg	0.080	7030655	0.10	0.20	7029615	0.36	7030655	0.12	0.020	7029615
Pyrene	mg/kg	0.063	7030655	0.087	0.18	7029615	0.32	7030655	0.13	0.020	7029615
Benzo(a)anthracene	mg/kg	0.035	7030655	0.051	0.087	7029615	0.16	7030655	0.067	0.020	7029615
Chrysene	mg/kg	0.055	7030655	0.077	0.11	7029615	0.21	7030655	0.17	0.020	7029615
Benzo(b&j)fluoranthene	mg/kg	0.062	7030655	0.095	0.13	7029615	0.20	7030655	0.16	0.020	7029615
Benzo(b)fluoranthene	mg/kg	0.039	7030655	0.058	0.078	7029615	0.12	7030655	0.10	0.020	7029615
Benzo(k)fluoranthene	mg/kg	0.021	7030655	0.031	0.041	7029615	0.066	7030655	0.045	0.020	7029615
Benzo(a)pyrene	mg/kg	0.033	7030655	0.053	0.081	7029615	0.13	7030655	0.066	0.020	7029615
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	7030655	<0.050	<0.050	7029615	0.068	7030655	<0.050	0.050	7029615
Dibenz(a,h)anthracene	mg/kg	<0.050	7030655	<0.050	<0.050	7029615	<0.050	7030655	<0.050	0.050	7029615
Benzo(g,h,i)perylene	mg/kg	<0.050	7030655	<0.050	0.055	7029615	0.082	7030655	0.069	0.050	7029615
Low Molecular Weight PAH`s	mg/kg	<0.050	7027609	0.056	0.17	7027609	0.43	7027609	0.067	0.050	7027609
High Molecular Weight PAH`s	mg/kg	0.39	7027609	0.55	0.96	7027609	1.7	7027609	0.93	0.050	7027609
Total PAH	mg/kg	0.43	7027609	0.61	1.1	7027609	2.2	7027609	0.99	0.050	7027609
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	104	7030655	103	100	7029615	111	7030655	103		7029615
D8-ACENAPHTHYLENE (sur.)	%	98	7030655	102	100	7029615	100	7030655	102		7029615
D8-NAPHTHALENE (sur.)	%	104	7030655	106	104	7029615	105	7030655	106		7029615
TERPHENYL-D14 (sur.)	%	102	7030655	105	102	7029615	109	7030655	105		7029615

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3691	HA3692		HA3693	HA3694	HA3695		HA3700		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-52**	**SP-53**	**QC Batch**	**SP-54**	**SP-55**	**SP-56**	**QC Batch**	**SP-56B**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	2.0	1.1	7027833	1.7	1.4	0.86	7027833	1.2	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.14	<0.10	7027833	0.12	0.11	<0.10	7027833	<0.10	0.10	7027833
Polycyclic Aromatics											
Naphthalene	mg/kg	<0.010	<0.010	7030655	0.012	<0.010	<0.010	7029615	<0.010	0.010	7030655
2-Methylnaphthalene	mg/kg	<0.020	<0.020	7030655	<0.020	<0.020	<0.020	7029615	<0.020	0.020	7030655
Acenaphthylene	mg/kg	0.018	0.014	7030655	0.0092	0.010	0.0071	7029615	0.0096	0.0050	7030655
Acenaphthene	mg/kg	<0.0050	<0.0050	7030655	0.016	<0.0050	<0.0050	7029615	<0.0050	0.0050	7030655
Fluorene	mg/kg	<0.020	<0.020	7030655	<0.020	<0.020	<0.020	7029615	<0.020	0.020	7030655
Phenanthrene	mg/kg	0.083	0.062	7030655	0.090	0.049	0.037	7029615	0.082	0.020	7030655
Anthracene	mg/kg	0.031	0.023(1)	7030655	0.022	0.015	0.010	7029615	0.020	0.0040	7030655
Fluoranthene	mg/kg	0.19	0.14(1)	7030655	0.22	0.12	0.079	7029615	0.14	0.020	7030655
Pyrene	mg/kg	0.15	0.11	7030655	0.17	0.10	0.067	7029615	0.10	0.020	7030655
Benzo(a)anthracene	mg/kg	0.086	0.053	7030655	0.086	0.060	0.038	7029615	0.051	0.020	7030655
Chrysene	mg/kg	0.13	0.077	7030655	0.13	0.083	0.052	7029615	0.076	0.020	7030655
Benzo(b&j)fluoranthene	mg/kg	0.16	0.079	7030655	0.14	0.10	0.069	7029615	0.093	0.020	7030655
Benzo(b)fluoranthene	mg/kg	0.098	0.049	7030655	0.086	0.062	0.044	7029615	0.059	0.020	7030655
Benzo(k)fluoranthene	mg/kg	0.053	0.024	7030655	0.043	0.034	<0.020	7029615	0.030	0.020	7030655
Benzo(a)pyrene	mg/kg	0.080	0.046	7030655	0.067	0.061	0.039	7029615	0.052	0.020	7030655
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	7030655	<0.050	<0.050	<0.050	7029615	<0.050	0.050	7030655
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7030655	<0.050	<0.050	<0.050	7029615	<0.050	0.050	7030655
Benzo(g,h,i)perylene	mg/kg	0.051	<0.050	7030655	<0.050	<0.050	<0.050	7029615	<0.050	0.050	7030655
Low Molecular Weight PAH`s	mg/kg	0.13	0.098	7027609	0.15	0.074	0.055	7027609	0.11	0.050	7027609
High Molecular Weight PAH`s	mg/kg	1.0	0.58	7027609	0.94	0.62	0.39	7027609	0.60	0.050	7027609
Total PAH	mg/kg	1.1	0.68	7027609	1.1	0.70	0.44	7027609	0.71	0.050	7027609
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	107	99	7030655	100	93	107	7029615	107		7030655
D8-ACENAPHTHYLENE (sur.)	%	101	101	7030655	94	92	102	7029615	98		7030655
D8-NAPHTHALENE (sur.)	%	106	105	7030655	98	95	106	7029615	103		7030655
TERPHENYL-D14 (sur.)	%	105	100	7030655	100	95	105	7029615	105		7030655

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit - Reanalysis confirmed sample inhomogeneity - Increased variability of results

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3701	HA3702		HA3703	HA3704		HA3705		HA3706		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-57**	**SP-58**	**QC Batch**	**SP-59**	**SP-60**	**QC Batch**	**SP-61**	**QC Batch**	**SP-62**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	1.8	3.3	7027833	1.3	1.5	7027833	1.6	7027833	1.6	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.12	0.16	7027833	<0.10	0.11	7027833	0.12	7027833	0.13	0.10	7027833
Polycyclic Aromatics												
Naphthalene	mg/kg	<0.010	0.059	7029615	<0.010	<0.010	7029049	<0.010	7029615	0.012	0.010	7030655
2-Methylnaphthalene	mg/kg	<0.020	0.050	7029615	<0.020	<0.020	7029049	<0.020	7029615	<0.020	0.020	7030655
Acenaphthylene	mg/kg	0.016	0.032	7029615	0.0098	0.014	7029049	0.016	7029615	0.020	0.0050	7030655
Acenaphthene	mg/kg	<0.0050	0.091	7029615	0.013	<0.0050	7029049	0.011	7029615	0.035	0.0050	7030655
Fluorene	mg/kg	<0.020	0.13	7029615	<0.020	<0.020	7029049	<0.020	7029615	0.032	0.020	7030655
Phenanthrene	mg/kg	0.064	1.7	7029615	0.087	0.054	7029049	0.056	7029615	0.12	0.020	7030655
Anthracene	mg/kg	0.020	0.045	7029615	0.023	0.018	7029049	0.018	7029615	0.033	0.0040	7030655
Fluoranthene	mg/kg	0.18	2.2	7029615	0.14	0.13	7029049	0.18	7029615	0.20	0.020	7030655
Pyrene	mg/kg	0.14	1.2	7029615	0.10	0.11	7029049	0.13	7029615	0.16	0.020	7030655
Benzo(a)anthracene	mg/kg	0.076	0.12	7029615	0.061	0.061	7029049	0.067	7029615	0.067	0.020	7030655
Chrysene	mg/kg	0.11	0.49	7029615	0.11	0.092	7029049	0.095	7029615	0.10	0.020	7030655
Benzo(b&j)fluoranthene	mg/kg	0.14	0.29	7029615	0.10	0.12	7029049	0.12	7029615	0.13	0.020	7030655
Benzo(b)fluoranthene	mg/kg	0.085	0.20	7029615	0.066	0.074	7029049	0.075	7029615	0.087	0.020	7030655
Benzo(k)fluoranthene	mg/kg	0.045	0.090	7029615	0.029	0.033	7029049	0.040	7029615	0.034	0.020	7030655
Benzo(a)pyrene	mg/kg	0.069	0.078	7029615	0.038	0.064	7029049	0.066	7029615	0.072	0.020	7030655
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	7029615	<0.050	<0.050	7029049	<0.050	7029615	<0.050	0.050	7030655
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7029615	<0.050	<0.050	7029049	<0.050	7029615	<0.050	0.050	7030655
Benzo(g,h,i)perylene	mg/kg	0.056	0.051	7029615	<0.050	0.052	7029049	0.054	7029615	0.062	0.050	7030655
Low Molecular Weight PAH`s	mg/kg	0.10	2.1	7027609	0.13	0.087	7027609	0.10	7027609	0.26	0.050	7027609
High Molecular Weight PAH`s	mg/kg	0.90	4.7	7027609	0.65	0.74	7027609	0.83	7027609	0.92	0.050	7027609
Total PAH	mg/kg	1.0	6.8	7027609	0.79	0.82	7027609	0.93	7027609	1.2	0.050	7027609
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	105	86	7029615	82	81	7029049	91	7029615	98		7030655
D8-ACENAPHTHYLENE (sur.)	%	100	92	7029615	80	78	7029049	92	7029615	97		7030655
D8-NAPHTHALENE (sur.)	%	106	96	7029615	82	79	7029049	95	7029615	101		7030655
TERPHENYL-D14 (sur.)	%	103	89	7029615	80	80	7029049	92	7029615	98		7030655

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3707	HA3708		HA3709		HA3715		HA3716	HA3717		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		
	UNITS	**SP-62B**	**SP-63**	**QC Batch**	**SP-64**	**QC Batch**	**SP-65**	**QC Batch**	**SP-66**	**SP-67**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	2.9	1.1	7027833	0.77	7027833	1.7	7027833	1.2	1.7	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.22	<0.10	7027833	<0.10	7027833	0.13	7027833	<0.10	0.13	0.10	7027833
Polycyclic Aromatics												
Naphthalene	mg/kg	<0.010	<0.010	7030655	<0.010	7029615	0.010	7030655	0.013	<0.010	0.010	7029615
2-Methylnaphthalene	mg/kg	<0.020	<0.020	7030655	<0.020	7029615	<0.020	7030655	<0.020	<0.020	0.020	7029615
Acenaphthylene	mg/kg	0.036	0.012	7030655	0.0082	7029615	0.018	7030655	0.014	0.021	0.0050	7029615
Acenaphthene	mg/kg	0.0097	0.010	7030655	<0.0050	7029615	0.035	7030655	0.043	0.022	0.0050	7029615
Fluorene	mg/kg	<0.020	<0.020	7030655	<0.020	7029615	0.035	7030655	0.045	0.021	0.020	7029615
Phenanthrene	mg/kg	0.047	0.041	7030655	<0.020	7029615	0.11	7030655	0.15	0.080	0.020	7029615
Anthracene	mg/kg	0.030	0.015	7030655	0.010	7029615	0.038	7030655	0.043	0.029	0.0040	7029615
Fluoranthene	mg/kg	0.16	0.095	7030655	0.050	7029615	0.27	7030655	0.19	0.16	0.020	7029615
Pyrene	mg/kg	0.15	0.076	7030655	0.047	7029615	0.19	7030655	0.14	0.13	0.020	7029615
Benzo(a)anthracene	mg/kg	0.11	0.041	7030655	0.025	7029615	0.076	7030655	0.048	0.065	0.020	7029615
Chrysene	mg/kg	0.14	0.070	7030655	0.042	7029615	0.11	7030655	0.085	0.10	0.020	7029615
Benzo(b&j)fluoranthene	mg/kg	0.24	0.086	7030655	0.066	7029615	0.14	7030655	0.10	0.15	0.020	7029615
Benzo(b)fluoranthene	mg/kg	0.14	0.054	7030655	0.043	7029615	0.086	7030655	0.066	0.093	0.020	7029615
Benzo(k)fluoranthene	mg/kg	0.068	0.025	7030655	<0.020	7029615	0.042	7030655	0.025	0.037	0.020	7029615
Benzo(a)pyrene	mg/kg	0.15	0.042	7030655	0.030	7029615	0.073	7030655	0.045	0.077	0.020	7029615
Indeno(1,2,3-cd)pyrene	mg/kg	0.092	<0.050	7030655	<0.050	7029615	<0.050	7030655	<0.050	0.054	0.050	7029615
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7030655	<0.050	7029615	<0.050	7030655	<0.050	<0.050	0.050	7029615
Benzo(g,h,i)perylene	mg/kg	0.097	<0.050	7030655	<0.050	7029615	0.053	7030655	<0.050	0.065	0.050	7029615
Low Molecular Weight PAH`s	mg/kg	0.12	0.079	7027609	<0.050	7027609	0.25	7027609	0.31	0.17	0.050	7027609
High Molecular Weight PAH`s	mg/kg	1.3	0.49	7027609	0.30	7027609	1.0	7027609	0.69	0.93	0.050	7027609
Total PAH	mg/kg	1.5	0.57	7027609	0.32	7027609	1.3	7027609	1.0	1.1	0.050	7027609
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	95	103	7030655	111	7029615	108	7030655	108	110		7029615
D8-ACENAPHTHYLENE (sur.)	%	97	96	7030655	102	7029615	97	7030655	100	104		7029615
D8-NAPHTHALENE (sur.)	%	101	100	7030655	104	7029615	102	7030655	106	109		7029615
TERPHENYL-D14 (sur.)	%	97	101	7030655	108	7029615	105	7030655	107	109		7029615

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3718	HA3719		HA3720	HA3721		HA3722		HA3723		
Sampling Date		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00	2013/07/24 14:00		2013/07/24 14:00		2013/07/24 14:00		
	UNITS	**SP-67B**	**SP-68**	**QC Batch**	**SP-69**	**SP-70**	**QC Batch**	**SP-71**	**QC Batch**	**SP-72**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	1.7	4.3	7027833	2.6	3.5	7027833	4.2	7027833	2.9	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.13	0.32	7027833	0.20	0.26	7027833	0.31	7027833	0.22	0.10	7027833
Polycyclic Aromatics												
Naphthalene	mg/kg	0.012	<0.010	7030655	<0.010	<0.010	7029615	<0.010	7030655	<0.010	0.010	7029615
2-Methylnaphthalene	mg/kg	<0.020	<0.020	7030655	<0.020	<0.020	7029615	<0.020	7030655	<0.020	0.020	7029615
Acenaphthylene	mg/kg	0.019	0.011	7030655	0.0078	0.012	7029615	0.0071	7030655	0.0078	0.0050	7029615
Acenaphthene	mg/kg	0.025	0.010	7030655	0.0065	0.0071	7029615	0.021	7030655	0.019	0.0050	7029615
Fluorene	mg/kg	0.025	<0.020	7030655	<0.020	<0.020	7029615	0.028	7030655	0.025	0.020	7029615
Phenanthrene	mg/kg	0.10	0.26	7030655	0.13	0.15	7029615	0.32	7030655	0.22	0.020	7029615
Anthracene	mg/kg	0.038	0.065	7030655	0.037	0.047	7029615	0.060	7030655	0.049	0.0040	7029615
Fluoranthene	mg/kg	0.20	0.51	7030655	0.30	0.35	7029615	0.58	7030655	0.39	0.020	7029615
Pyrene	mg/kg	0.16	0.37	7030655	0.23	0.27	7029615	0.44	7030655	0.30	0.020	7029615
Benzo(a)anthracene	mg/kg	0.069	0.24	7030655	0.14	0.18	7029615	0.23	7030655	0.16	0.020	7029615
Chrysene	mg/kg	0.11	0.28	7030655	0.17	0.22	7029615	0.29	7030655	0.20	0.020	7029615
Benzo(b&j)fluoranthene	mg/kg	0.13	0.34	7030655	0.19	0.27	7029615	0.33	7030655	0.22	0.020	7029615
Benzo(b)fluoranthene	mg/kg	0.082	0.21	7030655	0.12	0.17	7029615	0.21	7030655	0.14	0.020	7029615
Benzo(k)fluoranthene	mg/kg	0.042	0.095	7030655	0.062	0.088	7029615	0.093	7030655	0.071	0.020	7029615
Benzo(a)pyrene	mg/kg	0.072	0.21	7030655	0.13	0.17	7029615	0.20	7030655	0.14	0.020	7029615
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.11	7030655	0.068	0.096	7029615	0.11	7030655	0.070	0.050	7029615
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7030655	<0.050	<0.050	7029615	<0.050	7030655	<0.050	0.050	7029615
Benzo(g,h,i)perylene	mg/kg	0.058	0.12	7030655	0.078	0.11	7029615	0.12	7030655	0.088	0.050	7029615
Low Molecular Weight PAH`s	mg/kg	0.22	0.34	7027609	0.18	0.22	7027609	0.44	7027609	0.32	0.050	7027609
High Molecular Weight PAH`s	mg/kg	0.91	2.5	7027609	1.5	1.9	7027609	2.6	7027609	1.8	0.050	7027609
Total PAH	mg/kg	1.1	2.8	7027609	1.7	2.1	7027609	3.1	7027609	2.1	0.050	7027609
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	105	105	7030655	104	108	7029615	105	7030655	106		7029615
D8-ACENAPHTHYLENE (sur.)	%	99	95	7030655	102	101	7029615	97	7030655	100		7029615
D8-NAPHTHALENE (sur.)	%	104	100	7030655	106	104	7029615	101	7030655	102		7029615
TERPHENYL-D14 (sur.)	%	105	102	7030655	106	107	7029615	102	7030655	103		7029615

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3724		HA3725		HA3726		HA3727	HA3728		
Sampling Date		2013/07/24 14:00		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00		
	UNITS	**SP-72B**	**QC Batch**	**SP-73**	**QC Batch**	**SP-74**	**QC Batch**	**SP-75**	**SP-76**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	3.3	7027833	3.5	7027833	1.5	7027833	6.8	14	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.25	7027833	0.25	7027833	0.12	7027833	0.51	1.1	0.10	7027833
Polycyclic Aromatics											
Naphthalene	mg/kg	<0.010	7029615	<0.010	7030655	<0.010	7029615	0.025	0.054	0.010	7030655
2-Methylnaphthalene	mg/kg	<0.020	7029615	<0.020	7030655	<0.020	7029615	<0.020	<0.020	0.020	7030655
Acenaphthylene	mg/kg	0.0085	7029615	0.015	7030655	0.0052	7029615	0.017	0.020	0.0050	7030655
Acenaphthene	mg/kg	0.022	7029615	0.016	7030655	<0.0050	7029615	0.028	0.066	0.0050	7030655
Fluorene	mg/kg	0.024	7029615	0.020	7030655	<0.020	7029615	0.042	0.087	0.020	7030655
Phenanthrene	mg/kg	0.21	7029615	0.23	7030655	0.074	7029615	0.48	0.97	0.020	7030655
Anthracene	mg/kg	0.050	7029615	0.059	7030655	0.019	7029615	0.13	0.21	0.0040	7030655
Fluoranthene	mg/kg	0.44	7029615	0.48	7030655	0.16	7029615	1.1	1.9	0.020	7030655
Pyrene	mg/kg	0.33	7029615	0.36	7030655	0.13	7029615	0.83	1.4	0.020	7030655
Benzo(a)anthracene	mg/kg	0.18	7029615	0.19	7030655	0.076	7029615	0.41	0.82	0.020	7030655
Chrysene	mg/kg	0.22	7029615	0.24	7030655	0.097	7029615	0.45	0.92	0.020	7030655
Benzo(b&j)fluoranthene	mg/kg	0.26	7029615	0.26	7030655	0.12	7029615	0.52	1.1	0.020	7030655
Benzo(b)fluoranthene	mg/kg	0.17	7029615	0.17	7030655	0.076	7029615	0.33	0.70	0.020	7030655
Benzo(k)fluoranthene	mg/kg	0.074	7029615	0.085	7030655	0.030	7029615	0.14	0.34	0.020	7030655
Benzo(a)pyrene	mg/kg	0.16	7029615	0.16	7030655	0.067	7029615	0.32	0.73	0.020	7030655
Indeno(1,2,3-cd)pyrene	mg/kg	0.087	7029615	0.084	7030655	<0.050	7029615	0.16	0.36	0.050	7030655
Dibenz(a,h)anthracene	mg/kg	<0.050	7029615	<0.050	7030655	<0.050	7029615	0.056	0.12	0.050	7030655
Benzo(g,h,i)perylene	mg/kg	0.10	7029615	0.091	7030655	<0.050	7029615	0.18	0.43	0.050	7030655
Low Molecular Weight PAH`s	mg/kg	0.31	7027609	0.34	7027609	0.098	7027609	0.71	1.4	0.050	7027609
High Molecular Weight PAH`s	mg/kg	2.0	7027609	2.1	7027609	0.75	7027609	4.5	8.8	0.050	7027609
Total PAH	mg/kg	2.3	7027609	2.5	7027609	0.85	7027609	5.2	10	0.050	7027609
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	105	7029615	108	7030655	96	7029615	105	108		7030655
D8-ACENAPHTHYLENE (sur.)	%	96	7029615	98	7030655	85	7029615	101	103		7030655
D8-NAPHTHALENE (sur.)	%	101	7029615	102	7030655	87	7029615	105	108		7030655
TERPHENYL-D14 (sur.)	%	103	7029615	105	7030655	94	7029615	103	105		7030655

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3729		HA3730		HA3731	HA3732	HA3733	HA3734	HA3735		
Sampling Date		2013/07/25 12:00		2013/07/25 12:00		2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00		
	UNITS	**SP-77**	**QC Batch**	**SP-77B**	**QC Batch**	**SP-78**	**SP-79**	**SP-80**	**SP-81**	**SP-81B**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	4.8	7027833	3.2	7027833	3.0	15	3.0	4.9	2.7	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.36	7027833	0.24	7027833	0.22	1.2	0.23	0.37	0.21	0.10	7027833
Polycyclic Aromatics												
Naphthalene	mg/kg	0.013	7033167	<0.010	7029615	<0.010	0.016	<0.010	<0.010	<0.010	0.010	7030655
2-Methylnaphthalene	mg/kg	<0.020	7033167	<0.020	7029615	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7030655
Acenaphthylene	mg/kg	0.012	7033167	0.0080	7029615	0.0083	0.028	0.0072	0.024	0.0063	0.0050	7030655
Acenaphthene	mg/kg	0.017	7033167	0.0095	7029615	0.0057	0.045	0.0072	0.012	0.0087	0.0050	7030655
Fluorene	mg/kg	0.026	7033167	<0.020	7029615	<0.020	0.054	<0.020	0.027	<0.020	0.020	7030655
Phenanthrene	mg/kg	0.29(1)	7033167	0.18	7029615	0.12	0.77	0.16	0.27	0.16	0.020	7030655
Anthracene	mg/kg	0.096(1)	7033167	0.048	7029615	0.046	0.19	0.038	0.085	0.034	0.0040	7030655
Fluoranthene	mg/kg	0.58	7033167	0.37	7029615	0.27	1.7	0.36	0.59	0.32	0.020	7030655
Pyrene	mg/kg	0.44	7033167	0.28	7029615	0.20	1.3	0.29	0.41	0.24	0.020	7030655
Benzo(a)anthracene	mg/kg	0.28	7033167	0.18	7029615	0.19	0.84	0.16	0.27	0.15	0.020	7030655
Chrysene	mg/kg	0.33	7033167	0.21	7029615	0.18	0.92	0.19	0.30	0.17	0.020	7030655
Benzo(b&j)fluoranthene	mg/kg	0.36	7033167	0.24	7029615	0.22	1.2	0.24	0.37	0.20	0.020	7030655
Benzo(b)fluoranthene	mg/kg	0.24	7033167	0.15	7029615	0.14	0.74	0.15	0.24	0.13	0.020	7030655
Benzo(k)fluoranthene	mg/kg	0.10	7033167	0.072	7029615	0.071	0.32	0.067	0.12	0.066	0.020	7030655
Benzo(a)pyrene	mg/kg	0.24	7033167	0.15	7029615	0.13	0.79	0.14	0.25	0.13	0.020	7030655
Indeno(1,2,3-cd)pyrene	mg/kg	0.13	7033167	0.080	7029615	0.061	0.39	0.078	0.13	0.064	0.050	7030655
Dibenz(a,h)anthracene	mg/kg	<0.050	7033167	<0.050	7029615	<0.050	0.13	<0.050	<0.050	<0.050	0.050	7030655
Benzo(g,h,i)perylene	mg/kg	0.15	7033167	0.094	7029615	0.065	0.44	0.091	0.15	0.074	0.050	7030655
Low Molecular Weight PAH`s	mg/kg	0.45	7027609	0.25	7027609	0.18	1.1	0.21	0.42	0.21	0.050	7027609
High Molecular Weight PAH`s	mg/kg	2.8	7027609	1.8	7027609	1.5	8.8	1.8	2.8	1.5	0.050	7027609
Total PAH	mg/kg	3.3	7027609	2.1	7027609	1.7	9.9	2.0	3.3	1.8	0.050	7027609
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	103	7033167	98	7029615	110	107	101	108	107		7030655
D8-ACENAPHTHYLENE (sur.)	%	98	7033167	89	7029615	98	98	93	97	98		7030655
D8-NAPHTHALENE (sur.)	%	101	7033167	94	7029615	103	102	96	102	103		7030655
TERPHENYL-D14 (sur.)	%	101	7033167	95	7029615	107	104	98	105	105		7030655

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit - Increased variability of results

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HA3736	HA3737	HA3738	HA3739	HA3740	HA3741	HA3742	HA3743		
Sampling Date		2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/25 12:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/24 14:00	2013/07/25 15:00		
	UNITS	**SP-82**	**SP-83**	**SP-84**	**SP-84B**	**CS-21**	**CS-22**	**CS-23**	**CS-24**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	7.4	8.8	4.6	6.4	0.61	0.64	1.3	0.31	0.10	7027833
Benzo[a]pyrene equivalency	N/A	0.61	0.68	0.35	0.51	<0.10	<0.10	<0.10	<0.10	0.10	7027833
Polycyclic Aromatics											
Naphthalene	mg/kg	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	0.010	7033167
2-Methylnaphthalene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7033167
Acenaphthylene	mg/kg	0.0051	0.0094	0.0068	0.0079	<0.0050	<0.0050	0.012	<0.0050	0.0050	7033167
Acenaphthene	mg/kg	0.029	0.029	0.018	0.021	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	7033167
Fluorene	mg/kg	0.041	0.039	0.023	0.031	<0.020	<0.020	<0.020	<0.020	0.020	7033167
Phenanthrene	mg/kg	0.69	0.58	0.34	0.48	0.024	0.026	0.096	<0.020	0.020	7033167
Anthracene	mg/kg	0.14	0.13	0.070	0.11	0.0060	0.0074	0.014	<0.0040	0.0040	7033167
Fluoranthene	mg/kg	1.0	1.2	0.61	0.84	0.052	0.058	0.17	<0.020	0.020	7033167
Pyrene	mg/kg	0.89	0.84	0.48	0.67	0.043	0.049	0.14	<0.020	0.020	7033167
Benzo(a)anthracene	mg/kg	0.42	0.49	0.26	0.35	0.027	0.025	0.057	<0.020	0.020	7033167
Chrysene	mg/kg	0.48	0.58	0.31	0.42	0.036	0.037	0.095	<0.020	0.020	7033167
Benzo(b&j)fluoranthene	mg/kg	0.54	0.66	0.35	0.48	0.042	0.047	0.10	<0.020	0.020	7033167
Benzo(b)fluoranthene	mg/kg	0.34	0.43	0.22	0.31	0.027	0.031	0.067	<0.020	0.020	7033167
Benzo(k)fluoranthene	mg/kg	0.16	0.19	0.10	0.14	<0.020	<0.020	0.029	<0.020	0.020	7033167
Benzo(a)pyrene	mg/kg	0.40	0.44	0.24	0.33	0.025	0.024	0.046	<0.020	0.020	7033167
Indeno(1,2,3-cd)pyrene	mg/kg	0.22	0.25	0.12	0.18	<0.050	<0.050	<0.050	<0.050	0.050	7033167
Dibenz(a,h)anthracene	mg/kg	0.066	0.079	<0.050	0.057	<0.050	<0.050	<0.050	<0.050	0.050	7033167
Benzo(g,h,i)perylene	mg/kg	0.29	0.29	0.15	0.22	<0.050	<0.050	<0.050	<0.050	0.050	7033167
Low Molecular Weight PAH`s	mg/kg	0.91	0.80	0.45	0.64	<0.050	<0.050	0.14	<0.050	0.050	7027609
High Molecular Weight PAH`s	mg/kg	4.8	5.4	2.8	4.0	0.25	0.27	0.71	<0.050	0.050	7027609
Total PAH	mg/kg	5.7	6.2	3.3	4.6	0.28	0.30	0.84	<0.050	0.050	7027609
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	101	100	109	108	109	103	104	107		7033167
D8-ACENAPHTHYLENE (sur.)	%	100	96	102	102	101	97	101	99		7033167
D8-NAPHTHALENE (sur.)	%	102	99	106	105	106	100	107	103		7033167
TERPHENYL-D14 (sur.)	%	101	96	106	104	104	100	101	103		7033167

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

Package 1	10.7°C
Package 2	5.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

Sample HA3722, Elements by ICPMS (total): Test repeated.
Sample HA3723, Elements by ICPMS (total): Test repeated.

Maxxam

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7028276	Moisture	2013/07/29					<0.30	%	2.1	20		
7028298	Moisture	2013/07/30					<0.30	%	15.6	20		
7028299	Moisture	2013/07/30					<0.30	%	6.5	20		
7028477	Saturation %	2013/07/29			100	80 - 120	<1.0	%	0.7	30		
7028502	Total Antimony (Sb)	2013/07/29	96	75 - 125	96	75 - 125	<0.10	mg/kg			94	70 - 130
7028502	Total Arsenic (As)	2013/07/29	102	75 - 125	97	75 - 125	<0.50	mg/kg			92	70 - 130
7028502	Total Barium (Ba)	2013/07/29	NC	75 - 125	98	75 - 125	<0.10	mg/kg			97	70 - 130
7028502	Total Beryllium (Be)	2013/07/29	103	75 - 125	98	75 - 125	<0.40	mg/kg				
7028502	Total Cadmium (Cd)	2013/07/29	104	75 - 125	103	75 - 125	<0.050	mg/kg			99	70 - 130
7028502	Total Chromium (Cr)	2013/07/29	NC	75 - 125	97	75 - 125	<1.0	mg/kg			95	70 - 130
7028502	Total Cobalt (Co)	2013/07/29	101	75 - 125	99	75 - 125	<0.30	mg/kg			89	70 - 130
7028502	Total Copper (Cu)	2013/07/29	NC	75 - 125	99	75 - 125	<0.50	mg/kg			85	70 - 130
7028502	Total Lead (Pb)	2013/07/29	99	75 - 125	100	75 - 125	<0.10	mg/kg			91	70 - 130
7028502	Total Lithium (Li)	2013/07/29	97	75 - 125	97	75 - 125	<5.0	mg/kg				
7028502	Total Manganese (Mn)	2013/07/29	NC	75 - 125	98	75 - 125	<0.20	mg/kg			95	70 - 130
7028502	Total Mercury (Hg)	2013/07/29	103	75 - 125	102	75 - 125	<0.050	mg/kg			96	70 - 130
7028502	Total Molybdenum (Mo)	2013/07/29	107	75 - 125	95	75 - 125	<0.10	mg/kg			101	70 - 130
7028502	Total Nickel (Ni)	2013/07/29	103	75 - 125	97	75 - 125	<0.80	mg/kg			87	70 - 130
7028502	Total Selenium (Se)	2013/07/29	107	75 - 125	105	75 - 125	<0.50	mg/kg				
7028502	Total Silver (Ag)	2013/07/29	96	75 - 125	93	75 - 125	<0.050	mg/kg				
7028502	Total Strontium (Sr)	2013/07/29	NC	75 - 125	92	75 - 125	<0.10	mg/kg			91	70 - 130
7028502	Total Thallium (Tl)	2013/07/29	101	75 - 125	97	75 - 125	<0.050	mg/kg			85	70 - 130
7028502	Total Tin (Sn)	2013/07/29	95	75 - 125	91	75 - 125	<0.10	mg/kg				
7028502	Total Titanium (Ti)	2013/07/29	NC	75 - 125	92	75 - 125	<1.0	mg/kg			93	70 - 130
7028502	Total Uranium (U)	2013/07/29	99	75 - 125	99	75 - 125	<0.050	mg/kg			90	70 - 130
7028502	Total Vanadium (V)	2013/07/29	NC	75 - 125	96	75 - 125	<2.0	mg/kg			95	70 - 130
7028502	Total Zinc (Zn)	2013/07/29	NC	75 - 125	106	75 - 125	<1.0	mg/kg	6.4	30	91	70 - 130
7028502	Total Aluminum (Al)	2013/07/29					<100	mg/kg			102	70 - 130
7028502	Total Calcium (Ca)	2013/07/29					<100	mg/kg			102	70 - 130
7028502	Total Iron (Fe)	2013/07/29					<100	mg/kg			98	70 - 130
7028502	Total Magnesium (Mg)	2013/07/29					<100	mg/kg			92	70 - 130
7028502	Total Phosphorus (P)	2013/07/29					<10	mg/kg			87	70 - 130
7028502	Total Bismuth (Bi)	2013/07/29					<0.10	mg/kg				
7028502	Total Potassium (K)	2013/07/29					<100	mg/kg				
7028502	Total Sodium (Na)	2013/07/29					<100	mg/kg				
7028502	Total Zirconium (Zr)	2013/07/29					<0.50	mg/kg				
7028505	Soluble (2:1) pH	2013/07/30			100	97 - 103			0.1	20		
7028591	Total Antimony (Sb)	2013/07/30	101	75 - 125	98	75 - 125	<0.10	mg/kg	21.7	30	100	70 - 130
7028591	Total Arsenic (As)	2013/07/30	107	75 - 125	104	75 - 125	<0.50	mg/kg	1.6	30	97	70 - 130

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SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7028591	Total Barium (Ba)	2013/07/30	NC	75 - 125	102	75 - 125	<0.10	mg/kg	1.3	35	103	70 - 130
7028591	Total Beryllium (Be)	2013/07/30	106	75 - 125	108	75 - 125	<0.40	mg/kg	NC	30		
7028591	Total Cadmium (Cd)	2013/07/30	104	75 - 125	110	75 - 125	<0.050	mg/kg	2.2	30	103	70 - 130
7028591	Total Chromium (Cr)	2013/07/30	104	75 - 125	102	75 - 125	<1.0	mg/kg	5.1	30	101	70 - 130
7028591	Total Cobalt (Co)	2013/07/30	100	75 - 125	103	75 - 125	<0.30	mg/kg	4.4	30	92	70 - 130
7028591	Total Copper (Cu)	2013/07/30	NC	75 - 125	105	75 - 125	<0.50	mg/kg	1	30	90	70 - 130
7028591	Total Lead (Pb)	2013/07/30	NC	75 - 125	103	75 - 125	<0.10	mg/kg	0.8	35	97	70 - 130
7028591	Total Lithium (Li)	2013/07/30	107	75 - 125	102	75 - 125	<5.0	mg/kg	NC	30		
7028591	Total Manganese (Mn)	2013/07/30	NC	75 - 125	103	75 - 125	<0.20	mg/kg	0.2	30	97	70 - 130
7028591	Total Mercury (Hg)	2013/07/30	104	75 - 125	104	75 - 125	<0.050	mg/kg	NC	35	95	70 - 130
7028591	Total Molybdenum (Mo)	2013/07/30	114	75 - 125	93	75 - 125	<0.10	mg/kg	0.4	35	107	70 - 130
7028591	Total Nickel (Ni)	2013/07/30	102	75 - 125	102	75 - 125	<0.80	mg/kg	3.7	30	92	70 - 130
7028591	Total Selenium (Se)	2013/07/30	113	75 - 125	114	75 - 125	<0.50	mg/kg	NC	30		
7028591	Total Silver (Ag)	2013/07/30	100	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35		
7028591	Total Strontium (Sr)	2013/07/30	NC	75 - 125	100	75 - 125	<0.10	mg/kg	4.0	35	95	70 - 130
7028591	Total Thallium (Tl)	2013/07/30	96	75 - 125	94	75 - 125	<0.050	mg/kg	NC	30	81	70 - 130
7028591	Total Tin (Sn)	2013/07/30	107	75 - 125	90	75 - 125	<0.10	mg/kg	1.1	35		
7028591	Total Titanium (Ti)	2013/07/30	NC	75 - 125	98	75 - 125	<1.0	mg/kg	5.4	35	100	70 - 130
7028591	Total Uranium (U)	2013/07/30	102	75 - 125	100	75 - 125	<0.050	mg/kg	2.2	30	95	70 - 130
7028591	Total Vanadium (V)	2013/07/30	NC	75 - 125	101	75 - 125	<2.0	mg/kg	3.1	30	99	70 - 130
7028591	Total Zinc (Zn)	2013/07/30	NC	75 - 125	118	75 - 125	<1.0	mg/kg	7.5	30	95	70 - 130
7028591	Total Aluminum (Al)	2013/07/30					<100	mg/kg	3.3	35	98	70 - 130
7028591	Total Calcium (Ca)	2013/07/30					<100	mg/kg	1.3	30	96	70 - 130
7028591	Total Iron (Fe)	2013/07/30					<100	mg/kg	0.5	30	94	70 - 130
7028591	Total Magnesium (Mg)	2013/07/30					<100	mg/kg	2.3	30	88	70 - 130
7028591	Total Phosphorus (P)	2013/07/30					<10	mg/kg	1.1	30	89	70 - 130
7028591	Total Bismuth (Bi)	2013/07/30					<0.10	mg/kg	NC	30		
7028591	Total Potassium (K)	2013/07/30					<100	mg/kg	2.1	35		
7028591	Total Sodium (Na)	2013/07/30					<100	mg/kg	5.8	35		
7028591	Total Zirconium (Zr)	2013/07/30					<0.50	mg/kg	2.2	30		
7028594	Soluble (2:1) pH	2013/07/29			100	97 - 103			0.2	20		
7028683	Total Antimony (Sb)	2013/07/30	NC	75 - 125	101	75 - 125	<0.10	mg/kg	11.4	30	99	70 - 130
7028683	Total Arsenic (As)	2013/07/30	120	75 - 125	107	75 - 125	<0.50	mg/kg	18.6	30	100	70 - 130
7028683	Total Barium (Ba)	2013/07/30	NC	75 - 125	107	75 - 125	<0.10	mg/kg	0.04	35	108	70 - 130
7028683	Total Beryllium (Be)	2013/07/30	107	75 - 125	111	75 - 125	<0.40	mg/kg	NC	30		
7028683	Total Cadmium (Cd)	2013/07/30	104	75 - 125	113	75 - 125	<0.050	mg/kg	6.5	30	112	70 - 130
7028683	Total Chromium (Cr)	2013/07/30	105	75 - 125	107	75 - 125	<1.0	mg/kg	4.6	30	102	70 - 130
7028683	Total Cobalt (Co)	2013/07/30	101	75 - 125	108	75 - 125	<0.30	mg/kg	9.9	30	94	70 - 130
7028683	Total Copper (Cu)	2013/07/30	NC	75 - 125	110	75 - 125	<0.50	mg/kg	9.9	30	93	70 - 130

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Maxxam Job #: B364544
Report Date: 2013/08/02

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: MB

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7028683	Total Lead (Pb)	2013/07/30	NC	75 - 125	109	75 - 125	<0.10	mg/kg	5.7	35	98	70 - 130
7028683	Total Lithium (Li)	2013/07/30	110	75 - 125	107	75 - 125	<5.0	mg/kg	NC	30		
7028683	Total Manganese (Mn)	2013/07/30	NC	75 - 125	109	75 - 125	<0.20	mg/kg	3.3	30	101	70 - 130
7028683	Total Mercury (Hg)	2013/07/30	106	75 - 125	107	75 - 125	<0.050	mg/kg	NC	35	100	70 - 130
7028683	Total Molybdenum (Mo)	2013/07/30	109	75 - 125	101	75 - 125	<0.10	mg/kg	3.2	35	114	70 - 130
7028683	Total Nickel (Ni)	2013/07/30	103	75 - 125	108	75 - 125	<0.80	mg/kg	7.9	30	93	70 - 130
7028683	Total Selenium (Se)	2013/07/30	116	75 - 125	116	75 - 125	<0.50	mg/kg	NC	30		
7028683	Total Silver (Ag)	2013/07/30	101	75 - 125	104	75 - 125	<0.050	mg/kg	NC	35		
7028683	Total Strontium (Sr)	2013/07/30	NC	75 - 125	106	75 - 125	<0.10	mg/kg	3.7	35	99	70 - 130
7028683	Total Thallium (Tl)	2013/07/30	96	75 - 125	97	75 - 125	<0.050	mg/kg	NC	30	91	70 - 130
7028683	Total Tin (Sn)	2013/07/30	115	75 - 125	95	75 - 125	<0.10	mg/kg	12.1	35		
7028683	Total Titanium (Ti)	2013/07/30	NC	75 - 125	105	75 - 125	<1.0	mg/kg	3.7	35	108	70 - 130
7028683	Total Uranium (U)	2013/07/30	104	75 - 125	104	75 - 125	<0.050	mg/kg	1.6	30	95	70 - 130
7028683	Total Vanadium (V)	2013/07/30	NC	75 - 125	106	75 - 125	<2.0	mg/kg	2.0	30	102	70 - 130
7028683	Total Zinc (Zn)	2013/07/30	NC	75 - 125	121	75 - 125	<1.0	mg/kg	13.8	30	98	70 - 130
7028683	Total Aluminum (Al)	2013/07/30					<100	mg/kg	2.6	35	100	70 - 130
7028683	Total Calcium (Ca)	2013/07/30					<100	mg/kg	4.6	30	91	70 - 130
7028683	Total Iron (Fe)	2013/07/30					<100	mg/kg	0.4	30	92	70 - 130
7028683	Total Magnesium (Mg)	2013/07/30					<100	mg/kg	4.2	30	87	70 - 130
7028683	Total Phosphorus (P)	2013/07/30					<10	mg/kg	5.4	30	91	70 - 130
7028683	Total Bismuth (Bi)	2013/07/30					<0.10	mg/kg	NC	30		
7028683	Total Potassium (K)	2013/07/30					<100	mg/kg	4.7	35		
7028683	Total Sodium (Na)	2013/07/30					<100	mg/kg	1.5	35		
7028683	Total Zirconium (Zr)	2013/07/30					<0.50	mg/kg	NC	30		
7028690	Soluble (2:1) pH	2013/07/30			101	97 - 103			0.4	20		
7029049	D10-ANTHRACENE (sur.)	2013/07/29			92	60 - 130	91	%				
7029049	D8-ACENAPHTHYLENE (sur.)	2013/07/29			89	50 - 130	88	%				
7029049	D8-NAPHTHALENE (sur.)	2013/07/29			91	50 - 130	90	%				
7029049	TERPHENYL-D14 (sur.)	2013/07/29			90	60 - 130	90	%				
7029049	Naphthalene	2013/07/29			83	50 - 130	<0.010	mg/kg				
7029049	2-Methylnaphthalene	2013/07/29			84	50 - 130	<0.020	mg/kg				
7029049	Acenaphthylene	2013/07/29			81	50 - 130	<0.0050	mg/kg				
7029049	Acenaphthene	2013/07/29			84	50 - 130	<0.0050	mg/kg				
7029049	Fluorene	2013/07/29			84	50 - 130	<0.020	mg/kg				
7029049	Phenanthrene	2013/07/29			82	60 - 130	<0.020	mg/kg				
7029049	Anthracene	2013/07/29			84	60 - 130	<0.0040	mg/kg				
7029049	Fluoranthene	2013/07/29			85	60 - 130	<0.020	mg/kg				
7029049	Pyrene	2013/07/29			87	60 - 130	<0.020	mg/kg				
7029049	Benzo(a)anthracene	2013/07/29			76	60 - 130	<0.020	mg/kg				

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Your P.O. #: 700261278
Sampler Initials: MB

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7029049	Chrysene	2013/07/29			78	60 - 130	<0.020	mg/kg				
7029049	Benzo(b&j)fluoranthene	2013/07/29			76	60 - 130	<0.020	mg/kg				
7029049	Benzo(k)fluoranthene	2013/07/29			79	60 - 130	<0.020	mg/kg				
7029049	Benzo(a)pyrene	2013/07/29			83	60 - 130	<0.020	mg/kg				
7029049	Indeno(1,2,3-cd)pyrene	2013/07/29			84	60 - 130	<0.050	mg/kg				
7029049	Dibenz(a,h)anthracene	2013/07/29			82	60 - 130	<0.050	mg/kg				
7029049	Benzo(g,h,i)perylene	2013/07/29			82	60 - 130	<0.050	mg/kg				
7029049	Benzo(b)fluoranthene	2013/07/29					<0.020	mg/kg				
7029227	Wet Soluble Sodium (Na)	2013/07/29					<5.0	mg/L	0.4	30		
7029615	D10-ANTHRACENE (sur.)	2013/07/29	91	60 - 130	92	60 - 130	91	%				
7029615	D8-ACENAPHTHYLENE (sur.)	2013/07/29	78	50 - 130	89	50 - 130	93	%				
7029615	D8-NAPHTHALENE (sur.)	2013/07/29	97	50 - 130	94	50 - 130	99	%				
7029615	TERPHENYL-D14 (sur.)	2013/07/29	95	60 - 130	93	60 - 130	95	%				
7029615	Naphthalene	2013/07/29	94	50 - 130	99	50 - 130	<0.010	mg/kg	NC	50		
7029615	2-Methylnaphthalene	2013/07/29	97	50 - 130	100	50 - 130	<0.020	mg/kg	NC	50		
7029615	Acenaphthylene	2013/07/29	93	50 - 130	97	50 - 130	<0.0050	mg/kg	NC	50		
7029615	Acenaphthene	2013/07/29	97	50 - 130	99	50 - 130	<0.0050	mg/kg	NC	50		
7029615	Fluorene	2013/07/29	94	50 - 130	97	50 - 130	<0.020	mg/kg	NC	50		
7029615	Phenanthrene	2013/07/29	91	60 - 130	95	60 - 130	<0.020	mg/kg	NC	50		
7029615	Anthracene	2013/07/29	97	60 - 130	108	60 - 130	<0.0040	mg/kg	NC	50		
7029615	Fluoranthene	2013/07/29	98	60 - 130	106	60 - 130	<0.020	mg/kg	NC	50		
7029615	Pyrene	2013/07/29	100	60 - 130	108	60 - 130	<0.020	mg/kg	NC	50		
7029615	Benzo(a)anthracene	2013/07/29	90	60 - 130	98	60 - 130	<0.020	mg/kg	NC	50		
7029615	Chrysene	2013/07/29	91	60 - 130	101	60 - 130	<0.020	mg/kg	NC	50		
7029615	Benzo(b&j)fluoranthene	2013/07/29	96	60 - 130	99	60 - 130	<0.020	mg/kg	NC	50		
7029615	Benzo(k)fluoranthene	2013/07/29	88	60 - 130	96	60 - 130	<0.020	mg/kg	NC	50		
7029615	Benzo(a)pyrene	2013/07/29	95	60 - 130	100	60 - 130	<0.020	mg/kg	NC	50		
7029615	Indeno(1,2,3-cd)pyrene	2013/07/29	96	60 - 130	95	60 - 130	<0.050	mg/kg	NC	50		
7029615	Dibenz(a,h)anthracene	2013/07/29	95	60 - 130	91	60 - 130	<0.050	mg/kg	NC	50		
7029615	Benzo(g,h,i)perylene	2013/07/29	92	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
7029615	Benzo(b)fluoranthene	2013/07/29					<0.020	mg/kg	NC	N/A		
7029887	Soluble Chloride (Cl)	2013/07/29					<5.0	mg/L	7.4	30		
7030655	D10-ANTHRACENE (sur.)	2013/07/30	94	60 - 130	110	60 - 130	101	%				
7030655	D8-ACENAPHTHYLENE (sur.)	2013/07/30	92	50 - 130	102	50 - 130	91	%				
7030655	D8-NAPHTHALENE (sur.)	2013/07/30	95	50 - 130	104	50 - 130	96	%				
7030655	TERPHENYL-D14 (sur.)	2013/07/30	92	60 - 130	105	60 - 130	97	%				
7030655	Naphthalene	2013/07/31	94	50 - 130	102	50 - 130	<0.010	mg/kg	NC	50		
7030655	2-Methylnaphthalene	2013/07/31	95	50 - 130	104	50 - 130	<0.020	mg/kg	NC	50		
7030655	Acenaphthylene	2013/07/31	93	50 - 130	102	50 - 130	<0.0050	mg/kg	NC	50		

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Your P.O. #: 700261278
Sampler Initials: MB

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7030655	Acenaphthene	2013/07/31	97	50 - 130	105	50 - 130	<0.0050	mg/kg	NC	50		
7030655	Fluorene	2013/07/31	92	50 - 130	103	50 - 130	<0.020	mg/kg	NC	50		
7030655	Phenanthrene	2013/07/31	84	60 - 130	100	60 - 130	<0.020	mg/kg	NC	50		
7030655	Anthracene	2013/07/31	103	60 - 130	120	60 - 130	<0.0040	mg/kg	NC	50		
7030655	Fluoranthene	2013/07/31	90	60 - 130	111	60 - 130	<0.020	mg/kg	NC	50		
7030655	Pyrene	2013/07/31	97	60 - 130	114	60 - 130	<0.020	mg/kg	NC	50		
7030655	Benzo(a)anthracene	2013/07/31	86	60 - 130	101	60 - 130	<0.020	mg/kg	NC	50		
7030655	Chrysene	2013/07/31	86	60 - 130	104	60 - 130	<0.020	mg/kg	NC	50		
7030655	Benzo(b&j)fluoranthene	2013/07/31	92	60 - 130	101	60 - 130	<0.020	mg/kg	NC	50		
7030655	Benzo(k)fluoranthene	2013/07/31	85	60 - 130	106	60 - 130	<0.020	mg/kg	NC	50		
7030655	Benzo(a)pyrene	2013/07/31	91	60 - 130	107	60 - 130	<0.020	mg/kg	NC	50		
7030655	Indeno(1,2,3-cd)pyrene	2013/07/31	87	60 - 130	101	60 - 130	<0.050	mg/kg	NC	50		
7030655	Dibenz(a,h)anthracene	2013/07/31	87	60 - 130	97	60 - 130	<0.050	mg/kg	NC	50		
7030655	Benzo(g,h,i)perylene	2013/07/31	85	60 - 130	98	60 - 130	<0.050	mg/kg	NC	50		
7030655	Benzo(b)fluoranthene	2013/07/31					<0.020	mg/kg	NC	N/A		
7032368	Saturation %	2013/07/30			99	80 - 120	<1.0	%	1.2	30		
7032402	Saturation %	2013/07/30			99	80 - 120	<1.0	%	0.08	30		
7033029	Wet Soluble Sodium (Na)	2013/07/30					<5.0	mg/L	1.5	30		
7033030	Wet Soluble Sodium (Na)	2013/07/30					<5.0	mg/L	0.02	30		
7033167	D10-ANTHRACENE (sur.)	2013/07/30	98	60 - 130	100	60 - 130	100	%				
7033167	D8-ACENAPHTHYLENE (sur.)	2013/07/30	98	50 - 130	96	50 - 130	95	%				
7033167	D8-NAPHTHALENE (sur.)	2013/07/30	100	50 - 130	98	50 - 130	97	%				
7033167	TERPHENYL-D14 (sur.)	2013/07/30	95	60 - 130	100	60 - 130	101	%				
7033167	Naphthalene	2013/07/30	94	50 - 130	95	50 - 130	<0.010	mg/kg	NC	50		
7033167	2-Methylnaphthalene	2013/07/30	115	50 - 130	119	50 - 130	<0.020	mg/kg	NC	50		
7033167	Acenaphthylene	2013/07/30	97	50 - 130	99	50 - 130	<0.0050	mg/kg	NC	50		
7033167	Acenaphthene	2013/07/30	97	50 - 130	99	50 - 130	<0.0050	mg/kg	NC	50		
7033167	Fluorene	2013/07/30	97	50 - 130	100	50 - 130	<0.020	mg/kg	NC	50		
7033167	Phenanthrene	2013/07/30	94	60 - 130	97	60 - 130	<0.020	mg/kg	50.3(1)	50		
7033167	Anthracene	2013/07/30	107	60 - 130	112	60 - 130	<0.0040	mg/kg	63.0(1)	50		
7033167	Fluoranthene	2013/07/30	101	60 - 130	108	60 - 130	<0.020	mg/kg	39.5	50		
7033167	Pyrene	2013/07/30	102	60 - 130	110	60 - 130	<0.020	mg/kg	36.5	50		
7033167	Benzo(a)anthracene	2013/07/30	90	60 - 130	97	60 - 130	<0.020	mg/kg	38.8	50		
7033167	Chrysene	2013/07/30	90	60 - 130	99	60 - 130	<0.020	mg/kg	39.8	50		
7033167	Benzo(b&j)fluoranthene	2013/07/30	80	60 - 130	93	60 - 130	<0.020	mg/kg	34.1	50		
7033167	Benzo(k)fluoranthene	2013/07/30	105	60 - 130	104	60 - 130	<0.020	mg/kg	NC	50		
7033167	Benzo(a)pyrene	2013/07/30	99	60 - 130	103	60 - 130	<0.020	mg/kg	34.2	50		
7033167	Indeno(1,2,3-cd)pyrene	2013/07/30	103	60 - 130	107	60 - 130	<0.050	mg/kg	NC	50		
7033167	Dibenz(a,h)anthracene	2013/07/30	103	60 - 130	104	60 - 130	<0.050	mg/kg	NC	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7033167	Benzo(g,h,i)perylene	2013/07/30	103	60 - 130	105	60 - 130	<0.050	mg/kg	NC	50		
7033167	Benzo(b)fluoranthene	2013/07/30					<0.020	mg/kg	36.6	N/A		
7035000	Soluble Chloride (Cl)	2013/07/30					<5.0	mg/L	0.5	30		
7035001	Soluble Chloride (Cl)	2013/07/30					<5.0	mg/L	1.8	30		
7043699	Total Sodium (Na)	2013/08/02					<100	mg/kg				
7044705	Saturation %	2013/08/02			102	80 - 120	<1.0	%				

N/A = Not Applicable
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Validation Signature Page

Maxxam Job #: B364544

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, Data Validation Coordinator

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free:(800) 665 8566 Fax:(604) 630 3110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name	#26621 SLR CONSULTING (CANADA) LTD	Quotation #	B30720	MAXXAM JOB #: B364544	BOTTLE ORDER #: #24951
Contact Name	Bradley Klaver	Contact Name	Aaron Haegele	P.O. #	700261278		
Address	641- 800 BURRARD STREET	Address	6-40 CADILLAC AVENUE	Project #	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name		CHAIN OF CUSTODY #: C#404951-10-01	PROJECT MANAGER: Crystal Ireland
Phone	(604)775-9349 Fax (604)775-6645	Phone	(604)475-9595 Fax (250)475-9596	Site #	Colwood 43		
Email	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email	ahaegele@slrconsulting.com; ckoziey@slrconsulti	Sampled By	MB / RP		

REGULATORY CRITERIA
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HA3686	SP-47	July 24th, 2013	14:00	Soil		X	X					X				2	
2	HA3687	SP-48	↓	↓	↓		↓	↓					↓				↓	
3	HA3688	SP-49	↓	↓	↓		↓	↓					↓				↓	
4	HA3689	SP-50	↓	↓	↓		↓	↓					↓				↓	B364544
5	HA3690	SP-51	↓	↓	↓		↓	↓					↓				↓	
6	HA3691	SP-52	↓	↓	↓		↓	↓					↓				↓	
7	HA3692	SP-53	↓	↓	↓		↓	↓					↓				↓	
8	HA3693	SP-54	↓	↓	↓		↓	↓					↓				↓	
9	HA3694	SP-55	↓	↓	↓		↓	↓					↓				↓	
10	HA3695	SP-56.	↓	↓	↓		↓	↓					↓				↓	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Billie / Ben McKinnon	13/07/25	16:00	ERIC YAN	2013/07/26	08:00		☐	11, 11, 10 4, 5, 6	☐ Yes ☐ No N/A

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26821 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700281278
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:	
Phone:	(604)775-9349 Fax: (604)775-6845	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:	MB / BP

Laboratory Use Only:

MAXXAM JOB #:	BOTTLE ORDER #:
B364544	404951
CHAIN OF CUSTODY #:	PROJECT MANAGER:
C#404951-11-01	Crystal Ireland

REGULATORY CRITERIA
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HA3700 HA3700 2013/07/26	SP-56B	July 24, 2013	14:00	soil		X	X					X				2	
2	HA3701	SP-57																
3	HA3702	SP-58																
4	HA3703	SP-59																B364544
5	HA3704	SP-60																
6	HA3705	SP-61																
7	HA3706	SP-62																
8	HA3707	SP-62B																
9	HA3708	SP-63																
10	HA3709	SP-64																

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Ben / Ben McKinnon	13/07/25	16:00	Eric Y. ERIC YAN	2013/07/26	08:00		☐	11, 11, 10	☐ Yes ☐ No ☒ N/A

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4, 5, 6

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4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-Free:(800) 665 8566 Fax:(604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #: B364544	BOTTLE ORDER #: 404951
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700281278		
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #: C#404951-06-01	PROJECT MANAGER: Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:	MB/RP/BM		

REGULATORY CRITERIA
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

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1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HA3715	SP-65	July 24th 2013	14:00	Soil		X	X					X				2	
2	HA3716	SP-66	↓	↓	↓		↓	↓					↓				↓	
3	HA3717	SP-67	↓	↓	↓		↓	↓					↓				↓	
4	HA3718	SP-67B	↓	↓	↓		↓	↓					↓				↓	B364544
5	HA3719	SP-68	July 25th 2013	12:00	Soil		X	X					X				2	
6	HA3720	SP-69	↓	↓	↓		↓	↓					↓				↓	
7	HA3721	SP-70	↓	↓	↓		↓	↓					↓				↓	
8	HA3722	SP-71	↓	↓	↓		↓	↓					↓				↓	
9	HA3723	SP-72	↓	↓	↓		↓	↓					↓				↓	
10	HA3724	SP-72B	↓	↓	↓		↓	↓					↓				↓	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Ben McKinnon	13/07/25	16:00	Eric Y. ERIC YAN	2013/07/26	08:00		☐	11, 11, 10	☐ Yes ☐ No

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:	
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckoziey@slrconsulti	Sampled By:	BMCK

Laboratory Use Only:

MAXXAM JOB #:	BOTTLE ORDER #:
B364544	404951
CHAIN OF CUSTODY #:	**PROJECT MANAGER:**
C#404051-09-01	Crystal Ireland

REGULATORY CRITERIA
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

SPECIAL INSTRUCTIONS

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1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
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	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HA3725	SP-73	July 25th 2013	12:00	Soil		X	X					X				2	
2	HA3726	SP-74																
3	HA3727	SP-75																B364544
4	HA3728	SP-76																
5	HA3729	SP-77																
6	HA3730	SP-77B																
7	HA3731	SP-78																
8	HA3732	SP-79																
9	HA3733	SP-80																
10	HA3734	SP 81																

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Ben / Ben McKinnon	13/07/25	16:00	Eric Y ERIC YAN	2013/07/26	08:40		☐	11, 11, 10	☐ Yes ☐ No

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Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #: B364544	BOTTLE ORDER #: 604961
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	6-40 CADILLAC AVENUE VICTORIA BC V8Z 1T2	Project #:	205.03633.00000	CHAIN OF CUSTODY #: C4404951-14-01	PROJECT MANAGER: Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Project Name:			
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckoziey@slrconsulti	Site #:	Colwood 43		
				Sampled By:	BM/CK		

REGULATORY CRITERIA:
- ☐ CSR
- ☒ CCME
- ☐ BC Water Quality
- ☐ Other _____

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	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HA3735	SP - 81B	July 25 2013	12:00	Soil		X	X					X				2	
2	HA3736	SP - 82	↓	↓	↓		↓	↓					↓				↓	
3	HA3737	SP-83																
4	HA3738	SP - 84																B364544
5	HA3739	SP - 84B	↓	↓	↓		↓	↓					↓					
6	HA3740	CS - 21	July 24 2013	14:00	Soil		X	X										
7	HA3741	CS - 22	↓	↓	↓		X	X										
8	HA3742	CS - 23	↓	↓	↓		X	X										
9	HA3743	CS - 24	July 25 2013	15:00	Soil		X	X									↓	
10	~~HA3744~~ APF 2013/07/26																	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Bblin / Ben McKinnon	13/07/25	16:00	Eric Y. ERIC YAN	2013/07/26	08:00		☐	11, 11, 10 4, 6, 5	☐ Yes ☐ No NA

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Success Through Science®

Your P.O. #: 700261278
Your Project #: 205.03633.00000
Site#: Colwood 43
Site Location: COLWOOD 43
Your C.O.C. #: 40495115, 40495116

Attention: Aaron Haegele
SLR CONSULTING (CANADA) LTD
6-40 CADILLAC AVENUE
VICTORIA, BC
CANADA V8Z 1T2

Report Date: 2013/08/09

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B366663
Received: 2013/08/01, 07:40

Sample Matrix: Soil
Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	8	2013/08/03	2013/08/06	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	6	2013/08/07	2013/08/07	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	1	2013/08/08	2013/08/08	BBY6SOP-00011	SM-4500-Cl-
Soluble Chloride Ion	8	N/A	2013/08/07	BBY WI-00033	Calculated Parameter
Soluble Chloride Ion	6	N/A	2013/08/08	BBY WI-00033	Calculated Parameter
Soluble Chloride Ion	1	N/A	2013/08/09	BBY WI-00033	Calculated Parameter
Elements by ICPMS (total)	15	2013/08/03	2013/08/06	BBY7SOP-00004	BCMOE-SALM
Moisture	15	N/A	2013/08/03	BBY8SOP-00017	Ont MOE -E 3139
Soluble Sodium Ion	15	N/A	2013/08/06	BBY WI-00033	Calculated Parameter
PAH in Soil by GC/MS (SIM) - CCME	11	2013/08/02	2013/08/05	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	3	2013/08/02	2013/08/07	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/08/06	2013/08/06	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	11	N/A	2013/08/06	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	4	N/A	2013/08/07	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	11	N/A	2013/08/06	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	4	N/A	2013/08/07	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	15	2013/08/06	2013/08/06	BBY6SOP-00028	Carter, SSMA 16.2
Saturated Paste	15	2013/08/03	2013/08/03	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Cations (Ca,K,Mg,Na,S)	15	N/A	2013/08/06	BBY7SOP-00018	Carter Method 5.2

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Crystal Ireland, B.Sc., Account Specialist
Email: CIreland@maxxam.ca
Phone# (604) 638-5016

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Success Through Science®

Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

PHYSICAL TESTING (SOIL)

Maxxam ID		HB7701		HB7702		HB7703	HB7704	HB7705		
Sampling Date		2013/07/30		2013/07/30		2013/07/30	2013/07/30	2013/07/30		
	UNITS	**SP-85**	**QC Batch**	**SP-86**	**QC Batch**	**SP-86B**	**SP-87**	**SP-88**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	21	7043203	21	7043351	17	17	14	0.30	7043203

Maxxam ID		HB7706		HB7707	HB7708	HB7709	HB7710	HB7714		
Sampling Date		2013/07/30		2013/07/30	2013/07/30	2013/07/31	2013/07/31	2013/07/31		
	UNITS	**SP-89**	**QC Batch**	**SP-90**	**SP-90B**	**SP-91**	**SP-92**	**SP-93**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	4.1	7043351	3.7	3.6	5.7	7.3	7.5	0.30	7043203

Maxxam ID		HB7715		HB7716		HB7717	HB7718		
Sampling Date		2013/07/31		2013/07/31		2013/07/31	2013/07/31		
	UNITS	**SP-94**	**QC Batch**	**SP-95**	**QC Batch**	**SP-96**	**SP-97**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	8.4	7043203	7.7	7043351	8.0	8.4	0.30	7043203

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HB7701	HB7702	HB7703	HB7704	HB7705	HB7706	HB7707	HB7708	HB7709		
Sampling Date		2013/07/30	2013/07/30	2013/07/30	2013/07/30	2013/07/30	2013/07/30	2013/07/30	2013/07/30	2013/07/31		
	UNITS	**SP-85**	**SP-86**	**SP-86B**	**SP-87**	**SP-88**	**SP-89**	**SP-90**	**SP-90B**	**SP-91**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	9.39	9.26	9.34	9.50	9.51	8.10	8.12	8.10	8.13	0.010	7046963
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	13500	15400	15600	13600	13000	11900	13600	13100	17800	100	7046960
Total Antimony (Sb)	mg/kg	5.83	8.01	3.90	0.41	0.28	2.17	1.18	2.22	9.13	0.10	7046960
Total Arsenic (As)	mg/kg	9.66	20.6	9.40	1.86	1.18	4.68	5.43	5.53	22.3	0.50	7046960
Total Barium (Ba)	mg/kg	54.0	39.8	45.7	56.2	50.6	38.4	45.3	42.4	47.5	0.10	7046960
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7046960
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7046960
Total Cadmium (Cd)	mg/kg	0.202	0.207	0.239	0.195	0.187	0.110	0.072	0.055	0.335	0.050	7046960
Total Calcium (Ca)	mg/kg	96700	104000	98600	67500	99700	24900	16800	17800	95500	100	7046960
Total Chromium (Cr)	mg/kg	23.8	31.8	25.1	24.0	37.9	20.3	26.8	23.9	25.7	1.0	7046960
Total Cobalt (Co)	mg/kg	9.33	12.2	10.4	8.49	8.73	8.19	10.5	12.8	13.7	0.30	7046960
Total Copper (Cu)	mg/kg	48.5	60.3	62.3	30.1	30.0	31.4	33.5	32.6	54.9	0.50	7046960
Total Iron (Fe)	mg/kg	19500	32000	24600	19100	18700	18000	21500	20100	26100	100	7046960
Total Lead (Pb)	mg/kg	42.7	32.2	30.6	61.4	44.5	6.90	5.64	7.75	23.2	0.10	7046960
Total Lithium (Li)	mg/kg	8.0	7.9	9.1	8.1	7.5	7.2	9.3	8.2	10.8	5.0	7046960
Total Magnesium (Mg)	mg/kg	43300	34200	41800	42400	41500	6500	7730	7130	13200	100	7046960
Total Manganese (Mn)	mg/kg	380	429	416	337	446	343	395	350	493	0.20	7046960
Total Mercury (Hg)	mg/kg	0.055	<0.050	0.052	0.073	0.055	<0.050	<0.050	<0.050	0.210	0.050	7046960
Total Molybdenum (Mo)	mg/kg	1.97	4.08	2.78	1.14	1.31	0.46	0.40	0.43	5.70	0.10	7046960
Total Nickel (Ni)	mg/kg	18.8	20.8	18.5	15.7	15.0	13.5	17.3	16.7	24.6	0.80	7046960
Total Phosphorus (P)	mg/kg	936	929	880	570	600	1260	1040	1020	931	10	7046960
Total Potassium (K)	mg/kg	651	554	632	588	566	621	750	719	551	100	7046960
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7046960
Total Silver (Ag)	mg/kg	0.053	0.095	0.077	0.052	<0.050	0.067	0.059	<0.050	0.076	0.050	7046960
Total Sodium (Na)	mg/kg	4230	3710	4270	2880	2620	316	311	299	810	100	7046960
Total Strontium (Sr)	mg/kg	620	669	676	329	466	119	69.6	68.4	289	0.10	7046960
Total Thallium (Tl)	mg/kg	<0.050	<0.050	<0.050	0.071	0.080	<0.050	<0.050	<0.050	<0.050	0.050	7046960
Total Tin (Sn)	mg/kg	1.64	10.7	1.49	1.44	1.23	0.46	0.38	0.72	1.71	0.10	7046960
Total Titanium (Ti)	mg/kg	729	816	894	938	784	652	775	699	851	1.0	7046960
Total Uranium (U)	mg/kg	1.63	2.03	2.16	1.17	1.43	0.284	0.295	0.304	2.55	0.050	7046960
Total Vanadium (V)	mg/kg	46.9	57.0	56.3	53.7	41.8	39.1	51.7	43.3	53.6	2.0	7046960
Total Zinc (Zn)	mg/kg	65.6	86.3	65.0	39.8	33.3	50.4	59.8	61.6	110	1.0	7046960
Total Zirconium (Zr)	mg/kg	2.11	2.34	2.74	3.69	3.52	1.16	1.13	1.15	2.36	0.50	7046960

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HB7710	HB7714	HB7715	HB7716	HB7717	HB7718		
Sampling Date		2013/07/31	2013/07/31	2013/07/31	2013/07/31	2013/07/31	2013/07/31		
	UNITS	**SP-92**	**SP-93**	**SP-94**	**SP-95**	**SP-96**	**SP-97**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.24	8.25	8.56	8.09	8.50	8.17	0.010	7046963
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	19500	17500	17300	18700	18100	17700	100	7046960
Total Antimony (Sb)	mg/kg	17.3	6.67	28.0	9.60	3.01	4.37	0.10	7046960
Total Arsenic (As)	mg/kg	30.5	17.7	64.9	23.5	10.6	10.6	0.50	7046960
Total Barium (Ba)	mg/kg	56.1	49.3	43.6	35.3	37.5	56.9	0.10	7046960
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7046960
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	0.10	7046960
Total Cadmium (Cd)	mg/kg	0.203	0.262	0.300	0.257	0.193	0.238	0.050	7046960
Total Calcium (Ca)	mg/kg	56000	120000	94500	87400	76800	70200	100	7046960
Total Chromium (Cr)	mg/kg	30.1	33.8	26.7	32.3	25.5	37.2	1.0	7046960
Total Cobalt (Co)	mg/kg	16.0	13.2	17.0	15.6	14.8	13.2	0.30	7046960
Total Copper (Cu)	mg/kg	67.9	41.7	64.5	50.4	49.0	47.8	0.50	7046960
Total Iron (Fe)	mg/kg	28900	25600	26200	29900	27300	26900	100	7046960
Total Lead (Pb)	mg/kg	31.8	20.4	52.1	22.1	12.6	14.7	0.10	7046960
Total Lithium (Li)	mg/kg	9.7	10.7	9.1	9.3	9.4	10.9	5.0	7046960
Total Magnesium (Mg)	mg/kg	12900	13400	14900	14000	15000	12800	100	7046960
Total Manganese (Mn)	mg/kg	530	555	488	481	478	500	0.20	7046960
Total Mercury (Hg)	mg/kg	0.193	0.219	0.174	0.126	0.167	0.100	0.050	7046960
Total Molybdenum (Mo)	mg/kg	3.29	5.24	4.67	4.28	4.80	3.19	0.10	7046960
Total Nickel (Ni)	mg/kg	25.3	25.8	23.3	26.6	23.6	24.1	0.80	7046960
Total Phosphorus (P)	mg/kg	1540	1010	850	981	1070	1770	10	7046960
Total Potassium (K)	mg/kg	624	506	499	446	502	658	100	7046960
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7046960
Total Silver (Ag)	mg/kg	0.081	0.080	0.078	0.063	0.073	0.083	0.050	7046960
Total Sodium (Na)	mg/kg	932	806	1170	607	874	741	100	7046960
Total Strontium (Sr)	mg/kg	223	433	339	252	267	287	0.10	7046960
Total Thallium (Tl)	mg/kg	<0.050	0.066	0.062	<0.050	<0.050	<0.050	0.050	7046960
Total Tin (Sn)	mg/kg	2.55	1.48	4.77	1.95	1.13	1.00	0.10	7046960
Total Titanium (Ti)	mg/kg	1030	891	944	889	833	855	1.0	7046960
Total Uranium (U)	mg/kg	1.27	2.12	1.94	1.39	1.68	1.23	0.050	7046960
Total Vanadium (V)	mg/kg	66.1	54.2	54.6	63.1	57.2	55.2	2.0	7046960
Total Zinc (Zn)	mg/kg	139	86.2	224	97.8	75.7	92.0	1.0	7046960
Total Zirconium (Zr)	mg/kg	2.25	2.02	3.10	1.98	2.34	1.95	0.50	7046960

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HB7701	HB7702		HB7703		HB7704		HB7705			HB7706		
Sampling Date		2013/07/30	2013/07/30		2013/07/30		2013/07/30		2013/07/30			2013/07/30		
	UNITS	**SP-85**	**SP-86**	**RDL**	**SP-86B**	**RDL**	**SP-87**	**RDL**	**SP-88**	**RDL**	**QC Batch**	**SP-89**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	9160	9220	50	9390	50	7620	50	6700	50	7056882	121	5.0	7058992
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	4770	4800	26	5290	28	3740	25	3250	24	7043393	40.6	1.7	7043393
Soluble Sodium (Na)	mg/kg	2490	2450	2.6	2790	2.8	2020	2.5	1760	2.4	7042784	19.1	1.7	7042784
Soluble Parameters														
Saturation %	%	52.1	52.1	1.0	56.3	1.0	49.1	1.0	48.5	1.0	7046973	33.6	1.0	7046973
Wet Soluble Sodium (Na)	mg/L	4780	4710	5.0	4960	5.0	4120	5.0	3620	5.0	7049388	56.9	5.0	7049388

Maxxam ID		HB7707		HB7708		HB7709		HB7710		HB7714		
Sampling Date		2013/07/30		2013/07/30		2013/07/31		2013/07/31		2013/07/31		
	UNITS	**SP-90**	**RDL**	**SP-90B**	**RDL**	**SP-91**	**RDL**	**SP-92**	**RDL**	**SP-93**	**RDL**	**QC Batch**
ANIONS												
Soluble Chloride (Cl)	mg/L	115	5.0	136	5.0	1710	5.0	1710	5.0	1820	5.0	7049900
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	45.2	2.0	44.9	1.7	774	2.3	674	2.0	803	2.2	7043393
Soluble Sodium (Na)	mg/kg	19.4	2.0	18.6	1.7	355	2.3	298	2.0	354	2.2	7042784
Soluble Parameters												
Saturation %	%	39.3	1.0	33.1	1.0	45.2	1.0	39.5	1.0	44.2	1.0	7046973
Wet Soluble Sodium (Na)	mg/L	49.3	5.0	56.3	5.0	785	5.0	755	5.0	801	5.0	7049388

Maxxam ID		HB7715			HB7716			HB7717		HB7718		
Sampling Date		2013/07/31			2013/07/31			2013/07/31		2013/07/31		
	UNITS	**SP-94**	**RDL**	**QC Batch**	**SP-95**	**RDL**	**QC Batch**	**SP-96**	**RDL**	**SP-97**	**RDL**	**QC Batch**
ANIONS												
Soluble Chloride (Cl)	mg/L	2460	50	7049900	1510	50	7056882	1980	5.0	1650	5.0	7049900
Calculated Parameters												
Soluble Chloride (Cl)	mg/kg	1000	20	7043393	647	21	7043393	917	2.3	715	2.2	7043393
Soluble Sodium (Na)	mg/kg	510	2.0	7042784	283	2.1	7042784	464	2.3	233	2.2	7042784
Soluble Parameters												
Saturation %	%	40.8	1.0	7046973	42.9	1.0	7046973	46.3	1.0	43.3	1.0	7046973
Wet Soluble Sodium (Na)	mg/L	1250	5.0	7049388	659	5.0	7049388	1000	5.0	539	5.0	7049388

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HB7701	HB7702	HB7703	HB7704		HB7705		HB7706		
Sampling Date		2013/07/30	2013/07/30	2013/07/30	2013/07/30		2013/07/30		2013/07/30		
	UNITS	**SP-85**	**SP-86**	**SP-86B**	**SP-87**	**QC Batch**	**SP-88**	**QC Batch**	**SP-89**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	3.1	4.3	1.2	7.4	7042520	13	7042520	0.61	0.10	7042520
Benzo[a]pyrene equivalency	N/A	0.24	0.33	0.10	0.59	7042520	1.0	7042520	<0.10	0.10	7042520
Polycyclic Aromatics											
Naphthalene	mg/kg	<0.010	0.017	0.011	0.012	7047642	0.018	7049312	<0.010	0.010	7047642
2-Methylnaphthalene	mg/kg	<0.020	0.024	<0.020	<0.020	7047642	<0.020	7049312	<0.020	0.020	7047642
Acenaphthylene	mg/kg	0.0073	0.034	0.0076	0.014	7047642	0.029	7049312	0.0056	0.0050	7047642
Acenaphthene	mg/kg	0.014	0.026	0.0081	0.026	7047642	0.041	7049312	0.015	0.0050	7047642
Fluorene	mg/kg	0.020	0.050	<0.020	0.037	7047642	0.063	7049312	<0.020	0.020	7047642
Phenanthrene	mg/kg	0.24	0.49	0.067	0.45	7047642	0.72	7049312	0.040	0.020	7047642
Anthracene	mg/kg	0.054	0.11	0.018	0.11	7047642	0.22	7049312	0.0094	0.0040	7047642
Fluoranthene	mg/kg	0.44	0.73	0.12	0.88	7047642	1.5	7049312	0.044	0.020	7047642
Pyrene	mg/kg	0.33	0.61	0.11	0.66	7047642	1.1	7049312	0.043	0.020	7047642
Benzo(a)anthracene	mg/kg	0.18	0.27	0.057	0.41	7047642	0.75	7049312	0.020	0.020	7047642
Chrysene	mg/kg	0.21	0.27	0.072	0.48	7047642	0.88	7049312	0.031	0.020	7047642
Benzo(b&j)fluoranthene	mg/kg	0.23	0.30	0.084	0.54	7047642	0.92	7049312	0.042	0.020	7047642
Benzo(b)fluoranthene	mg/kg	0.15	0.18	0.053	0.35	7047642	0.60	7049312	0.025	0.020	7047642
Benzo(k)fluoranthene	mg/kg	0.074	0.11	0.028	0.17	7047642	0.31	7049312	<0.020	0.020	7047642
Benzo(a)pyrene	mg/kg	0.15	0.22	0.057	0.37	7047642	0.64	7049312	0.031	0.020	7047642
Indeno(1,2,3-cd)pyrene	mg/kg	0.083	0.12	<0.050	0.21	7047642	0.35	7049312	<0.050	0.050	7047642
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	<0.050	0.076	7047642	0.14	7049312	<0.050	0.050	7047642
Benzo(g,h,i)perylene	mg/kg	0.10	0.14	0.052	0.25	7047642	0.40	7049312	<0.050	0.050	7047642
Low Molecular Weight PAH`s	mg/kg	0.33	0.75	0.11	0.65	7040107	1.1	7040107	0.070	0.050	7040107
High Molecular Weight PAH`s	mg/kg	1.9	3.0	0.63	4.4	7040107	7.5	7040107	0.24	0.050	7040107
Total PAH	mg/kg	2.3	3.7	0.74	5.1	7040107	8.6	7040107	0.31	0.050	7040107
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	90	93	91	90	7047642	93	7049312	85		7047642
D8-ACENAPHTHYLENE (sur.)	%	88	87	87	86	7047642	95	7049312	85		7047642
D8-NAPHTHALENE (sur.)	%	90	89	89	88	7047642	99	7049312	84		7047642
TERPHENYL-D14 (sur.)	%	92	92	92	91	7047642	95	7049312	87		7047642

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HB7707		HB7708	HB7709	HB7710	HB7714		
Sampling Date		2013/07/30		2013/07/30	2013/07/31	2013/07/31	2013/07/31		
	UNITS	**SP-90**	**QC Batch**	**SP-90B**	**SP-91**	**SP-92**	**SP-93**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.31	7042520	0.31	0.96	4.3	1.1	0.10	7042520
Benzo[a]pyrene equivalency	N/A	<0.10	7042520	<0.10	<0.10	0.26	<0.10	0.10	7042520
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	7049312	<0.010	<0.010	<0.010	<0.010	0.010	7047642
2-Methylnaphthalene	mg/kg	<0.020	7049312	<0.020	<0.020	<0.020	<0.020	0.020	7047642
Acenaphthylene	mg/kg	<0.0050	7049312	<0.0050	0.012	0.014	0.0096	0.0050	7047642
Acenaphthene	mg/kg	<0.0050	7049312	<0.0050	0.0070	0.0079	0.0069	0.0050	7047642
Fluorene	mg/kg	<0.020	7049312	<0.020	<0.020	<0.020	<0.020	0.020	7047642
Phenanthrene	mg/kg	<0.020	7049312	<0.020	0.034	0.34(1)	0.046	0.020	7047642
Anthracene	mg/kg	<0.0040	7049312	<0.0040	0.015	0.29(1)	0.015	0.0040	7047642
Fluoranthene	mg/kg	<0.020	7049312	0.020	0.085	1.9(1)	0.13	0.020	7047642
Pyrene	mg/kg	<0.020	7049312	<0.020	0.071	1.1(1)	0.099	0.020	7047642
Benzo(a)anthracene	mg/kg	<0.020	7049312	<0.020	0.036	0.44(1)	0.048	0.020	7047642
Chrysene	mg/kg	<0.020	7049312	<0.020	0.057	0.40(1)	0.066	0.020	7047642
Benzo(b&j)fluoranthene	mg/kg	<0.020	7049312	<0.020	0.073	0.27(1)	0.078	0.020	7047642
Benzo(b)fluoranthene	mg/kg	<0.020	7049312	<0.020	0.045	0.17(1)	0.048	0.020	7047642
Benzo(k)fluoranthene	mg/kg	<0.020	7049312	<0.020	0.021	0.080	0.026	0.020	7047642
Benzo(a)pyrene	mg/kg	<0.020	7049312	<0.020	0.040	0.14(1)	0.046	0.020	7047642
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	7049312	<0.050	<0.050	0.060	<0.050	0.050	7047642
Dibenz(a,h)anthracene	mg/kg	<0.050	7049312	<0.050	<0.050	<0.050	<0.050	0.050	7047642
Benzo(g,h,i)perylene	mg/kg	<0.050	7049312	<0.050	<0.050	0.065	<0.050	0.050	7047642
Low Molecular Weight PAH`s	mg/kg	<0.050	7040107	<0.050	0.067	0.65	0.078	0.050	7040107
High Molecular Weight PAH`s	mg/kg	<0.050	7040107	<0.050	0.43	4.6	0.54	0.050	7040107
Total PAH	mg/kg	<0.050	7040107	<0.050	0.50	5.3	0.61	0.050	7040107
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	93	7049312	90	90	103	88		7047642
D8-ACENAPHTHYLENE (sur.)	%	99	7049312	86	87	104	87		7047642
D8-NAPHTHALENE (sur.)	%	102	7049312	87	89	105	87		7047642
TERPHENYL-D14 (sur.)	%	98	7049312	91	91	104	91		7047642

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate RPD above control limit - Reanalysis confirmed sample inhomogeneity - Increased variability of results

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HB7715	HB7716		HB7717		HB7718		
Sampling Date		2013/07/31	2013/07/31		2013/07/31		2013/07/31		
	UNITS	**SP-94**	**SP-95**	**QC Batch**	**SP-96**	**QC Batch**	**SP-97**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	0.61	0.66	7042520	0.70	7042520	1.4	0.10	7042520
Benzo[a]pyrene equivalency	N/A	<0.10	<0.10	7042520	<0.10	7042520	0.13	0.10	7042520
Polycyclic Aromatics									
Naphthalene	mg/kg	<0.010	<0.010	7047642	<0.010	7049312	<0.010	0.010	7047642
2-Methylnaphthalene	mg/kg	<0.020	<0.020	7047642	<0.020	7049312	<0.020	0.020	7047642
Acenaphthylene	mg/kg	<0.0050	0.0075	7047642	0.0053	7049312	0.014	0.0050	7047642
Acenaphthene	mg/kg	<0.0050	0.0052	7047642	0.0055	7049312	0.0095	0.0050	7047642
Fluorene	mg/kg	<0.020	<0.020	7047642	<0.020	7049312	<0.020	0.020	7047642
Phenanthrene	mg/kg	0.028	0.031	7047642	0.030	7049312	0.047	0.020	7047642
Anthracene	mg/kg	0.0073	0.012	7047642	0.0076	7049312	0.015	0.0040	7047642
Fluoranthene	mg/kg	0.054	0.062	7047642	0.061	7049312	0.099	0.020	7047642
Pyrene	mg/kg	0.048	0.051	7047642	0.053	7049312	0.093	0.020	7047642
Benzo(a)anthracene	mg/kg	0.025	0.025	7047642	0.030	7049312	0.064	0.020	7047642
Chrysene	mg/kg	0.034	0.039	7047642	0.048	7049312	0.081	0.020	7047642
Benzo(b&j)fluoranthene	mg/kg	0.043	0.050	7047642	0.052	7049312	0.11	0.020	7047642
Benzo(b)fluoranthene	mg/kg	0.027	0.031	7047642	0.032	7049312	0.064	0.020	7047642
Benzo(k)fluoranthene	mg/kg	<0.020	<0.020	7047642	<0.020	7049312	0.033	0.020	7047642
Benzo(a)pyrene	mg/kg	0.025	0.027	7047642	0.030	7049312	0.075	0.020	7047642
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	<0.050	7047642	<0.050	7049312	<0.050	0.050	7047642
Dibenz(a,h)anthracene	mg/kg	<0.050	<0.050	7047642	<0.050	7049312	<0.050	0.050	7047642
Benzo(g,h,i)perylene	mg/kg	<0.050	<0.050	7047642	<0.050	7049312	0.057	0.050	7047642
Low Molecular Weight PAH`s	mg/kg	<0.050	0.056	7040107	<0.050	7040107	0.085	0.050	7040107
High Molecular Weight PAH`s	mg/kg	0.26	0.29	7040107	0.31	7040107	0.67	0.050	7040107
Total PAH	mg/kg	0.29	0.34	7040107	0.35	7040107	0.76	0.050	7040107
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	95	90	7047642	98	7049312	90		7047642
D8-ACENAPHTHYLENE (sur.)	%	91	85	7047642	98	7049312	89		7047642
D8-NAPHTHALENE (sur.)	%	93	87	7047642	99	7049312	90		7047642
TERPHENYL-D14 (sur.)	%	96	91	7047642	100	7049312	93		7047642

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

Package 1	5.0°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7043203	Moisture	2013/08/03					<0.30	%	0.7	20		
7043351	Moisture	2013/08/03					<0.30	%	2.4	20		
7046960	Total Antimony (Sb)	2013/08/06	100	75 - 125	109	75 - 125	<0.10	mg/kg	NC	30	97	70 - 130
7046960	Total Arsenic (As)	2013/08/06	102	75 - 125	106	75 - 125	<0.50	mg/kg	6.1	30	94	70 - 130
7046960	Total Barium (Ba)	2013/08/06	NC	75 - 125	99	75 - 125	<0.10	mg/kg	1.1	35	97	70 - 130
7046960	Total Beryllium (Be)	2013/08/06	115	75 - 125	113	75 - 125	<0.40	mg/kg	NC	30		
7046960	Total Cadmium (Cd)	2013/08/06	116	75 - 125	116	75 - 125	<0.050	mg/kg	NC	30	104	70 - 130
7046960	Total Chromium (Cr)	2013/08/06	NC	75 - 125	106	75 - 125	<1.0	mg/kg	2.7	30	104	70 - 130
7046960	Total Cobalt (Co)	2013/08/06	108	75 - 125	109	75 - 125	<0.30	mg/kg	3.8	30	92	70 - 130
7046960	Total Copper (Cu)	2013/08/06	107	75 - 125	110	75 - 125	<0.50	mg/kg	2.7	30	90	70 - 130
7046960	Total Lead (Pb)	2013/08/06	109	75 - 125	111	75 - 125	<0.10	mg/kg	4.6	35	94	70 - 130
7046960	Total Lithium (Li)	2013/08/06	108	75 - 125	111	75 - 125	<5.0	mg/kg	NC	30		
7046960	Total Manganese (Mn)	2013/08/06	NC	75 - 125	110	75 - 125	<0.20	mg/kg	2.8	30	98	70 - 130
7046960	Total Mercury (Hg)	2013/08/06	112	75 - 125	114	75 - 125	<0.050	mg/kg	NC	35	120	70 - 130
7046960	Total Molybdenum (Mo)	2013/08/06	108	75 - 125	106	75 - 125	<0.10	mg/kg	NC	35	102	70 - 130
7046960	Total Nickel (Ni)	2013/08/06	108	75 - 125	109	75 - 125	<0.80	mg/kg	2.8	30	92	70 - 130
7046960	Total Selenium (Se)	2013/08/06	109	75 - 125	116	75 - 125	<0.50	mg/kg	NC	30		
7046960	Total Silver (Ag)	2013/08/06	99	75 - 125	103	75 - 125	<0.050	mg/kg	NC	35		
7046960	Total Strontium (Sr)	2013/08/06	110	75 - 125	107	75 - 125	<0.10	mg/kg	0.002	35	99	70 - 130
7046960	Total Thallium (Tl)	2013/08/06	107	75 - 125	107	75 - 125	<0.050	mg/kg	NC	30	89	70 - 130
7046960	Total Tin (Sn)	2013/08/06	103	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
7046960	Total Titanium (Ti)	2013/08/06	NC	75 - 125	104	75 - 125	1.0, RDL=1.0	mg/kg	1	35	106	70 - 130
7046960	Total Uranium (U)	2013/08/06	107	75 - 125	106	75 - 125	<0.050	mg/kg	2.3	30	95	70 - 130
7046960	Total Vanadium (V)	2013/08/06	NC	75 - 125	102	75 - 125	<2.0	mg/kg	2.1	30	100	70 - 130
7046960	Total Zinc (Zn)	2013/08/06	NC	75 - 125	120	75 - 125	<1.0	mg/kg	20.0	30	93	70 - 130
7046960	Total Aluminum (Al)	2013/08/06					<100	mg/kg	0.8	35	108	70 - 130
7046960	Total Calcium (Ca)	2013/08/06					<100	mg/kg	4.0	30	94	70 - 130
7046960	Total Iron (Fe)	2013/08/06					<100	mg/kg	0.8	30	94	70 - 130
7046960	Total Magnesium (Mg)	2013/08/06					<100	mg/kg	2.6	30	95	70 - 130
7046960	Total Phosphorus (P)	2013/08/06					<10	mg/kg	3.4	30	86	70 - 130
7046960	Total Bismuth (Bi)	2013/08/06					<0.10	mg/kg	NC	30		
7046960	Total Potassium (K)	2013/08/06					<100	mg/kg	NC	35		
7046960	Total Sodium (Na)	2013/08/06					<100	mg/kg				
7046960	Total Zirconium (Zr)	2013/08/06					<0.50	mg/kg	1.5	30		
7046963	Soluble (2:1) pH	2013/08/06			99	97 - 103			0	20		
7046973	Saturation %	2013/08/03			101	80 - 120	<1.0	%	0.04	30		
7047642	D10-ANTHRACENE (sur.)	2013/08/05	84	60 - 130	86	60 - 130	90	%				
7047642	D8-ACENAPHTHYLENE (sur.)	2013/08/05	85	50 - 130	87	50 - 130	92	%				
7047642	D8-NAPHTHALENE (sur.)	2013/08/05	85	50 - 130	88	50 - 130	95	%				

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7047642	TERPHENYL-D14 (sur.)	2013/08/05	86	60 - 130	89	60 - 130	92	%				
7047642	Naphthalene	2013/08/06	80	50 - 130	84	50 - 130	<0.010	mg/kg	NC	50		
7047642	2-Methylnaphthalene	2013/08/06	102	50 - 130	105	50 - 130	<0.020	mg/kg	NC	50		
7047642	Acenaphthylene	2013/08/06	81	50 - 130	85	50 - 130	<0.0050	mg/kg	NC	50		
7047642	Acenaphthene	2013/08/06	82	50 - 130	86	50 - 130	<0.0050	mg/kg	NC	50		
7047642	Fluorene	2013/08/06	82	50 - 130	87	50 - 130	<0.020	mg/kg	NC	50		
7047642	Phenanthrene	2013/08/06	73	60 - 130	78	60 - 130	<0.020	mg/kg	NC	50		
7047642	Anthracene	2013/08/06	87	60 - 130	93	60 - 130	<0.0040	mg/kg	NC	50		
7047642	Fluoranthene	2013/08/06	82	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
7047642	Pyrene	2013/08/06	83	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7047642	Benzo(a)anthracene	2013/08/06	76	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
7047642	Chrysene	2013/08/06	74	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
7047642	Benzo(b&j)fluoranthene	2013/08/06	76	60 - 130	85	60 - 130	<0.020	mg/kg	NC	50		
7047642	Benzo(k)fluoranthene	2013/08/06	77	60 - 130	82	60 - 130	<0.020	mg/kg	NC	50		
7047642	Benzo(a)pyrene	2013/08/06	83	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7047642	Indeno(1,2,3-cd)pyrene	2013/08/06	86	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
7047642	Dibenz(a,h)anthracene	2013/08/06	84	60 - 130	87	60 - 130	<0.050	mg/kg	NC	50		
7047642	Benzo(g,h,i)perylene	2013/08/06	85	60 - 130	88	60 - 130	<0.050	mg/kg	NC	50		
7047642	Benzo(b)fluoranthene	2013/08/06					<0.020	mg/kg	NC	N/A		
7049312	D10-ANTHRACENE (sur.)	2013/08/06	107	60 - 130	88	60 - 130	90	%				
7049312	D8-ACENAPHTHYLENE (sur.)	2013/08/06	97	50 - 130	91	50 - 130	91	%				
7049312	D8-NAPHTHALENE (sur.)	2013/08/06	100	50 - 130	92	50 - 130	92	%				
7049312	TERPHENYL-D14 (sur.)	2013/08/06	104	60 - 130	92	60 - 130	94	%				
7049312	Naphthalene	2013/08/07	97	50 - 130	89	50 - 130	<0.010	mg/kg	NC	50		
7049312	2-Methylnaphthalene	2013/08/07	122	50 - 130	111	50 - 130	<0.020	mg/kg	NC	50		
7049312	Acenaphthylene	2013/08/07	94	50 - 130	90	50 - 130	<0.0050	mg/kg	NC(1)	50		
7049312	Acenaphthene	2013/08/07	97	50 - 130	93	50 - 130	<0.0050	mg/kg	NC(1)	50		
7049312	Fluorene	2013/08/07	96	50 - 130	91	50 - 130	<0.020	mg/kg	NC	50		
7049312	Phenanthrene	2013/08/07	93	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
7049312	Anthracene	2013/08/07	105	60 - 130	89	60 - 130	<0.0040	mg/kg	NC	50		
7049312	Fluoranthene	2013/08/07	101	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7049312	Pyrene	2013/08/07	102	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(a)anthracene	2013/08/07	89	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7049312	Chrysene	2013/08/07	89	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(b&j)fluoranthene	2013/08/07	88	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(k)fluoranthene	2013/08/07	99	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(a)pyrene	2013/08/07	101	60 - 130	95	60 - 130	<0.020	mg/kg	NC	50		
7049312	Indeno(1,2,3-cd)pyrene	2013/08/07	106	60 - 130	98	60 - 130	<0.050	mg/kg	NC	50		
7049312	Dibenz(a,h)anthracene	2013/08/07	103	60 - 130	95	60 - 130	<0.050	mg/kg	NC	50		

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Maxxam Job #: B366663
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7049312	Benzo(g,h,i)perylene	2013/08/07	101	60 - 130	96	60 - 130	<0.050	mg/kg	NC	50		
7049312	Benzo(b)fluoranthene	2013/08/07					<0.020	mg/kg	NC	N/A		
7049388	Wet Soluble Sodium (Na)	2013/08/06					<5.0	mg/L	1.6	30		
7049900	Soluble Chloride (Cl)	2013/08/06					5.8, RDL=5.0	mg/L	4.6	30		
7056882	Soluble Chloride (Cl)	2013/08/07					<5.0	mg/L				
7058992	Soluble Chloride (Cl)	2013/08/08					<5.0	mg/L	3.1	30		

N/A = Not Applicable
RDL = Reportable Detection Limit
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - RDL raised due to sample matrix interference.

Validation Signature Page

Maxxam Job #: B366663

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
#606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bradley Klaver	Contact Name:	Aaron Hisegele	P.O. #:	700261276	B366663	404951
Address:	841- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000	CHAIN OF CUSTODY #:	PROJECT MANAGER:
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		C#404951-15-01	Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:			

REGULATORY CRITERIA:
- [ ] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HB7701	SP-85	July 31 2013		Sil		X	X					X				2	
2	HB7702	SP-86			Sil		X	X					X				2	
3	HB7703	SP-86B			Sil		X	X					X				2	
4	HB7704	SP-87			Sil		X	X					X				2	
5	HB7705	SP-88			Sil		X	X					X				2	
6	HB7706	SP-89			Sil		X	X					X				2	
7	HB7707	SP-90			Sil		X	X					X				2	
8	HB7708	SP-90B	July 30 2013		Sil		X	X					X				2	
9	HB7709	SP-91	July 31 2013		Sil		X	X					X				2	B366663
10	HB7710	SP-92	July 31 2013		Sil		X	X					X				2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler
Richard Plaudt	13/17/31	17:30	Helen Zhen	2013/08/01	07:40		[ ]	3,7,5	N/A [ ] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #: 404951
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET	Address:	6-40 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V8		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #: C#404951-16-01	PROJECT MANAGER: Crystal Ireland
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:			

REGULATORY CRITERIA:
- [ ] CSR
- [x] CCME
- [ ] BC Water Quality
- [ ] Other _____

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HB7114	SP-93	July 31	2013	Soil		X	X					X				2	
2	HB7115	SP-94			Soil		X	X					X				2	
3	HB7116	SP-95			Soil		X	X					X				2	
4	HB7117	SP-96			Soil		X	X					X				2	
5	HB7118	SP-97	July 31	2013	Soil		X	X					X				2	
6																		
7																		
8																		
9																		
10																		

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): [ ]
1 Day [ ] 2 Day [ ] 3 Day [ ] Date Required _____
Rush Confirmation Number: _____ (call lab for #)

9566663

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
J. Richard Plavell	13/07/31	17:30	Helen Zhen	2013/08/01	07:40		[ ]	3, 7, 5	NA [ ] Yes [ ] No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Success Through Science®

Your P.O. #: 700261278
Your Project #: 205.03633.00000
Site Location: COLWOOD 43
Your C.O.C. #: 40495119, 40495122, 40495123

Attention: Aaron Haegele
SLR CONSULTING (CANADA) LTD
6-40 CADILLAC AVENUE
VICTORIA, BC
CANADA V8Z 1T2

Report Date: 2013/08/09

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B367167
Received: 2013/08/02, 07:45

Sample Matrix: Soil
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride (soluble)	20	2013/08/03	2013/08/07	BBY6SOP-00011	SM-4500-Cl-
Chloride (soluble)	8	2013/08/07	2013/08/07	BBY6SOP-00011	SM-4500-Cl-
Soluble Chloride Ion	28	N/A	2013/08/08	BBY WI-00033	Calculated Parameter
Elements by ICPMS (total)	28	2013/08/03	2013/08/06	BBY7SOP-00004	BCMOE-SALM
Moisture	8	N/A	2013/08/06	BBY8SOP-00017	Ont MOE -E 3139
Moisture	20	N/A	2013/08/07	BBY8SOP-00017	Ont MOE -E 3139
Soluble Sodium Ion	28	N/A	2013/08/06	BBY WI-00033	Calculated Parameter
PAH in Soil by GC/MS (SIM) - CCME	1	2013/08/03	2013/08/07	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/08/03	2013/08/08	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	1	2013/08/04	2013/08/09	BBY8SOP-00022	EPA 8270D
PAH in Soil by GC/MS (SIM) - CCME	25	2013/08/06	2013/08/08	BBY8SOP-00022	EPA 8270D
Benzo[a]pyrene Equivalency	1	N/A	2013/08/07	BBY WI-00033	CCME Guidelines
Benzo[a]pyrene Equivalency	27	N/A	2013/08/09	BBY WI-00033	CCME Guidelines
Total LMW, HMW, Total PAH Calc	1	N/A	2013/08/07	BBY WI-00033	BC MOE Lab Method
Total LMW, HMW, Total PAH Calc	27	N/A	2013/08/09	BBY WI-00033	BC MOE Lab Method
pH (2:1 DI Water Extract)	16	2013/08/06	2013/08/06	BBY6SOP-00028	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	12	2013/08/07	2013/08/07	BBY6SOP-00028	Carter, SSMA 16.2
Saturated Paste	25	2013/08/03	2013/08/03	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	2	2013/08/03	2013/08/06	BBY6SOP-00030	Carter SSMA 18.2.2
Saturated Paste	1	2013/08/06	2013/08/06	BBY6SOP-00030	Carter SSMA 18.2.2
Soluble Cations (Ca,K,Mg,Na,S)	28	N/A	2013/08/06	BBY7SOP-00018	Carter Method 5.2

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Crystal Ireland, B.Sc., Account Specialist
Email: CIreland@maxxam.ca
Phone# (604) 638-5016

==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

PHYSICAL TESTING (SOIL)

Maxxam ID		HC0656	HC0657		HC0658		HC0659	HC0660	HC0661		HC0662		
Sampling Date		2013/08/01	2013/08/01		2013/08/01		2013/08/01	2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-98**	**SP-98B**	**QC Batch**	**SP-99**	**QC Batch**	**SP-100**	**SP-101**	**SP-102**	**QC Batch**	**SP-103**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	14	16	7046743	21	7047637	13	17	26	7046743	19	0.30	7047637

Maxxam ID		HC0663		HC0664		HC0665	HC0670	HC0671	HC0672	HC0673		
Sampling Date		2013/08/01		2013/08/01		2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01		
	UNITS	**SP-103B**	**QC Batch**	**SP-104**	**QC Batch**	**SP-105**	**SP-106**	**SP-107**	**SP-108**	**SP-109**	**RDL**	**QC Batch**
Physical Properties												
Moisture	%	22	7047637	14	7046794	17	7.7	7.1	16	16	0.30	7046743

Maxxam ID		HC0674		HC0675	HC0676		HC0677		HC0678	HC0679	HC0686		
Sampling Date		2013/08/01		2013/08/01	2013/08/01		2013/08/01		2013/08/01	2013/08/01	2013/08/01		
	UNITS	**SP-110**	**QC Batch**	**SP-110B**	**SP-111**	**QC Batch**	**SP-112**	**QC Batch**	**SP-113**	**SP-114**	**SP-115**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	11	7047637	7.8	10	7046743	15	7047637	22	22	20	0.30	7046743

Maxxam ID		HC0687		HC0688	HC0689		HC0690		HC0691	HC0692		
Sampling Date		2013/08/01		2013/08/01	2013/08/01		2013/08/01		2013/08/01	2013/08/01		
	UNITS	**SP-116**	**QC Batch**	**SP-117**	**SP-118**	**QC Batch**	**SP-118B**	**QC Batch**	**SP-119**	**SP-120**	**RDL**	**QC Batch**
Physical Properties												
Moisture	%	26	7046740	29	30	7046743	28	7046740	23	30	0.30	7046743

Maxxam ID		HC0693		
Sampling Date		2013/08/01		
	UNITS	**SP-121**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	33	0.30	7046743

RDL = Reportable Detection Limit

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HC0656	HC0657	HC0658	HC0659	HC0660	HC0661	HC0662		HC0663		
Sampling Date		2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-98**	**SP-98B**	**SP-99**	**SP-100**	**SP-101**	**SP-102**	**SP-103**	**QC Batch**	**SP-103B**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	9.50(1)	9.49	9.37	9.51	9.58	9.60	9.52	7047237	9.43	0.010	7046977
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	11700	12100	12200	9930	10800	10600	9360	7047233	10900	100	7046975
Total Antimony (Sb)	mg/kg	0.32	0.32	7.64	0.31	0.98	0.33	0.25	7047233	0.35	0.10	7046975
Total Arsenic (As)	mg/kg	3.13	2.89	18.2	2.41	3.81	3.46	2.72	7047233	3.31	0.50	7046975
Total Barium (Ba)	mg/kg	52.8	49.0	53.1	42.9	45.6	57.5	54.5	7047233	59.5	0.10	7046975
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	7047233	<0.40	0.40	7046975
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	7047233	<0.10	0.10	7046975
Total Cadmium (Cd)	mg/kg	0.225	0.270	0.232	0.319	0.300	0.291	0.284	7047233	0.261	0.050	7046975
Total Calcium (Ca)	mg/kg	81400	79000	118000	84500	87300	124000	115000	7047233	105000	100	7046975
Total Chromium (Cr)	mg/kg	19.3	21.3	21.1	15.6	18.6	14.5	14.9	7047233	20.2	1.0	7046975
Total Cobalt (Co)	mg/kg	8.50	8.76	9.51	6.28	7.96	7.42	6.27	7047233	7.90	0.30	7046975
Total Copper (Cu)	mg/kg	33.1	34.7	41.4	26.0	50.6	35.0	22.7	7047233	36.7	0.50	7046975
Total Iron (Fe)	mg/kg	19000	18700	23200	14600	16300	15100	13900	7047233	17300	100	7046975
Total Lead (Pb)	mg/kg	56.5	46.5	38.6	34.8	41.0	36.2	28.7	7047233	36.2	0.10	7046975
Total Lithium (Li)	mg/kg	7.0	6.8	7.9	7.6	6.7	7.9	7.0	7047233	8.3	5.0	7046975
Total Magnesium (Mg)	mg/kg	31000	28600	42900	27300	31100	37500	28000	7047233	28400	100	7046975
Total Manganese (Mn)	mg/kg	350	311	389	245	288	308	310	7047233	339	0.20	7046975
Total Mercury (Hg)	mg/kg	0.061	0.069	0.055	0.074	0.082	0.090	0.072	7047233	0.085	0.050	7046975
Total Molybdenum (Mo)	mg/kg	1.65	1.76	3.65	1.48	1.80	2.73	2.51	7047233	2.51	0.10	7046975
Total Nickel (Ni)	mg/kg	14.6	14.4	16.5	12.7	14.0	13.4	11.7	7047233	14.9	0.80	7046975
Total Phosphorus (P)	mg/kg	581	579	985	615	583	530	543	7047233	589	10	7046975
Total Potassium (K)	mg/kg	571	657	819	666	523	894	637	7047233	725	100	7046975
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7047233	<0.50	0.50	7046975
Total Silver (Ag)	mg/kg	0.062	<0.050	0.058	<0.050	<0.050	<0.050	<0.050	7047233	0.056	0.050	7046975
Total Sodium (Na)	mg/kg	3120	2860	6810	4140	3250	4530	4130	7047233	4220	100	7046975
Total Strontium (Sr)	mg/kg	408	410	742	525	472	722	664	7047233	555	0.10	7046975
Total Thallium (Tl)	mg/kg	0.070	0.061	<0.050	0.139	0.097	<0.050	0.068	7047233	0.066	0.050	7046975
Total Tin (Sn)	mg/kg	2.42	2.06	2.90	2.02	2.14	1.88	1.51	7047233	1.87	0.10	7046975
Total Titanium (Ti)	mg/kg	839	818	734	760	751	672	621	7047233	784	1.0	7046975
Total Uranium (U)	mg/kg	1.34	1.38	2.61	1.23	1.36	2.11	2.47	7047233	1.75	0.050	7046975
Total Vanadium (V)	mg/kg	44.3	47.6	48.1	37.3	45.2	39.1	35.5	7047233	45.2	2.0	7046975
Total Zinc (Zn)	mg/kg	33.3	36.9	80.1	35.0	35.7	36.4	31.8	7047233	39.3	1.0	7046975
Total Zirconium (Zr)	mg/kg	3.21	3.21	2.20	3.38	2.84	3.91	3.22	7047233	3.72	0.50	7046975

RDL = Reportable Detection Limit
(1) - Due to high absorbtivity of the sample the water soil extraction ratio has changed from 2:1 to 4:1.

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HC0664	HC0665		HC0670	HC0671	HC0672	HC0673	HC0674	HC0675		
Sampling Date		2013/08/01	2013/08/01		2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01	2013/08/01		
	UNITS	**SP-104**	**SP-105**	**QC Batch**	**SP-106**	**SP-107**	**SP-108**	**SP-109**	**SP-110**	**SP-110B**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	9.56	9.46	7047237	8.00	8.16	8.75	8.81	8.10	8.08	0.010	7046977
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	12100	12400	7047233	13700	18500	14200	14500	15900	16900	100	7046975
Total Antimony (Sb)	mg/kg	2.09	0.42	7047233	2.87	10.6	5.68	4.46	4.88	3.53	0.10	7046975
Total Arsenic (As)	mg/kg	6.12	2.97	7047233	8.01	19.7	17.7	14.3	17.9	14.3	0.50	7046975
Total Barium (Ba)	mg/kg	40.1	45.8	7047233	96.1	58.9	66.3	48.0	73.8	65.3	0.10	7046975
Total Beryllium (Be)	mg/kg	<0.40	<0.40	7047233	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7046975
Total Bismuth (Bi)	mg/kg	<0.10	<0.10	7047233	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7046975
Total Cadmium (Cd)	mg/kg	0.230	0.237	7047233	0.399	0.290	0.471	0.377	0.398	0.359	0.050	7046975
Total Calcium (Ca)	mg/kg	77200	77500	7047233	54700	49400	126000	116000	87200	85600	100	7046975
Total Chromium (Cr)	mg/kg	24.7	22.6	7047233	22.6	32.9	22.2	25.6	29.8	24.8	1.0	7046975
Total Cobalt (Co)	mg/kg	10.3	9.69	7047233	10.6	17.1	13.3	15.0	14.4	15.3	0.30	7046975
Total Copper (Cu)	mg/kg	51.8	38.2	7047233	42.5	83.7	46.8	56.5	60.5	49.4	0.50	7046975
Total Iron (Fe)	mg/kg	19100	19700	7047233	21500	28600	25100	25100	26600	27800	100	7046975
Total Lead (Pb)	mg/kg	31.2	24.3	7047233	15.4	18.3	71.2	25.7	20.9	17.3	0.10	7046975
Total Lithium (Li)	mg/kg	7.7	8.3	7047233	9.8	9.6	11.9	11.0	10.4	11.7	5.0	7046975
Total Magnesium (Mg)	mg/kg	29000	24900	7047233	7830	11700	14900	15200	11900	12300	100	7046975
Total Manganese (Mn)	mg/kg	317	335	7047233	490	548	1950	1080	636	616	0.20	7046975
Total Mercury (Hg)	mg/kg	<0.050	0.078	7047233	0.062	0.099	0.213	0.212	0.166	0.148	0.050	7046975
Total Molybdenum (Mo)	mg/kg	1.43	2.08	7047233	1.60	3.86	10.5	8.37	5.44	6.85	0.10	7046975
Total Nickel (Ni)	mg/kg	18.0	17.6	7047233	17.8	26.2	22.1	25.1	25.1	22.4	0.80	7046975
Total Phosphorus (P)	mg/kg	586	606	7047233	2860	1470	1050	955	1640	1610	10	7046975
Total Potassium (K)	mg/kg	632	586	7047233	656	598	762	591	585	600	100	7046975
Total Selenium (Se)	mg/kg	<0.50	<0.50	7047233	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7046975
Total Silver (Ag)	mg/kg	0.060	<0.050	7047233	0.088	0.098	0.077	0.074	0.087	0.081	0.050	7046975
Total Sodium (Na)	mg/kg	2870	3530	7047233	501	537	3600	2940	1460	1160	100	7046975
Total Strontium (Sr)	mg/kg	390	395	7047233	270	193	487	447	579	322	0.10	7046975
Total Thallium (Tl)	mg/kg	0.090	0.074	7047233	<0.050	<0.050	0.089	0.058	0.051	<0.050	0.050	7046975
Total Tin (Sn)	mg/kg	1.41	2.52	7047233	1.00	2.14	2.69	2.21	1.40	1.15	0.10	7046975
Total Titanium (Ti)	mg/kg	818	817	7047233	595	978	759	833	804	858	1.0	7046975
Total Uranium (U)	mg/kg	1.15	1.41	7047233	0.734	1.30	2.78	2.48	2.00	1.97	0.050	7046975
Total Vanadium (V)	mg/kg	47.6	51.1	7047233	48.6	65.9	50.5	51.5	57.0	59.5	2.0	7046975
Total Zinc (Zn)	mg/kg	43.6	38.0	7047233	92.3	93.6	78.5	75.4	92.2	81.3	1.0	7046975
Total Zirconium (Zr)	mg/kg	3.48	3.46	7047233	1.45	2.09	2.06	2.20	2.01	2.08	0.50	7046975

RDL = Reportable Detection Limit

Maxxam

Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HC0676		HC0677		HC0678	HC0679	HC0686	HC0687		HC0688		
Sampling Date		2013/08/01		2013/08/01		2013/08/01	2013/08/01	2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-111**	**QC Batch**	**SP-112**	**QC Batch**	**SP-113**	**SP-114**	**SP-115**	**SP-116**	**QC Batch**	**SP-117**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.04	7047237	8.71	7046977	8.74	8.43	8.97	9.59	7047237	9.57	0.010	7046977
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	15800	7047233	12800	7046975	12600	12900	14500	8910	7047233	9140	100	7046975
Total Antimony (Sb)	mg/kg	10.6	7047233	4.39	7046975	1.68	6.78	4.93	1.14	7047233	1.10	0.10	7046975
Total Arsenic (As)	mg/kg	18.8	7047233	22.3	7046975	12.3	19.0	17.1	6.17	7047233	4.85	0.50	7046975
Total Barium (Ba)	mg/kg	80.7	7047233	54.8	7046975	50.9	49.7	60.4	50.8	7047233	64.2	0.10	7046975
Total Beryllium (Be)	mg/kg	<0.40	7047233	<0.40	7046975	<0.40	<0.40	<0.40	<0.40	7047233	<0.40	0.40	7046975
Total Bismuth (Bi)	mg/kg	<0.10	7047233	<0.10	7046975	<0.10	<0.10	<0.10	<0.10	7047233	<0.10	0.10	7046975
Total Cadmium (Cd)	mg/kg	0.322	7047233	0.397	7046975	0.329	0.320	0.430	0.286	7047233	0.343	0.050	7046975
Total Calcium (Ca)	mg/kg	74900	7047233	126000	7046975	120000	90700	102000	118000	7047233	119000	100	7046975
Total Chromium (Cr)	mg/kg	25.7	7047233	23.4	7046975	19.4	26.2	23.0	13.4	7047233	14.9	1.0	7046975
Total Cobalt (Co)	mg/kg	13.5	7047233	17.1	7046975	11.5	12.5	12.4	6.71	7047233	5.92	0.30	7046975
Total Copper (Cu)	mg/kg	54.1	7047233	45.7	7046975	37.6	72.0	46.4	27.1	7047233	25.8	0.50	7046975
Total Iron (Fe)	mg/kg	25500	7047233	22300	7046975	20800	22000	25100	14700	7047233	14600	100	7046975
Total Lead (Pb)	mg/kg	27.0	7047233	30.2	7046975	30.8	46.9	35.1	34.5	7047233	38.8	0.10	7046975
Total Lithium (Li)	mg/kg	9.6	7047233	10.1	7046975	10.8	10.3	11.6	8.1	7047233	9.7	5.0	7046975
Total Magnesium (Mg)	mg/kg	10700	7047233	13600	7046975	13400	12900	22300	43200	7047233	40800	100	7046975
Total Manganese (Mn)	mg/kg	453	7047233	1460	7046975	1670	1280	1760	354	7047233	334	0.20	7046975
Total Mercury (Hg)	mg/kg	0.098	7047233	0.180	7046975	0.182	0.176	0.126	0.127	7047233	0.256	0.050	7046975
Total Molybdenum (Mo)	mg/kg	5.68	7047233	7.92	7046975	13.0	7.66	7.47	2.69	7047233	2.19	0.10	7046975
Total Nickel (Ni)	mg/kg	22.7	7047233	23.0	7046975	21.1	21.7	22.1	11.3	7047233	11.1	0.80	7046975
Total Phosphorus (P)	mg/kg	1400	7047233	1330	7046975	1300	1440	1350	734	7047233	842	10	7046975
Total Potassium (K)	mg/kg	498	7047233	711	7046975	781	825	923	691	7047233	804	100	7046975
Total Selenium (Se)	mg/kg	<0.50	7047233	<0.50	7046975	<0.50	<0.50	<0.50	<0.50	7047233	<0.50	0.50	7046975
Total Silver (Ag)	mg/kg	0.079	7047233	0.078	7046975	0.076	0.065	0.078	0.055	7047233	<0.050	0.050	7046975
Total Sodium (Na)	mg/kg	879	7047233	3670	7046975	4140	4660	4320	4550	7047233	3800	100	7046975
Total Strontium (Sr)	mg/kg	276	7047233	501	7046975	458	376	486	600	7047233	637	0.10	7046975
Total Thallium (Tl)	mg/kg	<0.050	7047233	0.072	7046975	0.063	0.053	0.084	0.064	7047233	0.086	0.050	7046975
Total Tin (Sn)	mg/kg	1.88	7047233	2.34	7046975	2.04	3.27	3.59	4.54	7047233	2.81	0.10	7046975
Total Titanium (Ti)	mg/kg	767	7047233	612	7046975	628	613	727	524	7047233	600	1.0	7046975
Total Uranium (U)	mg/kg	1.70	7047233	2.45	7046975	3.05	3.09	2.29	2.15	7047233	1.77	0.050	7046975
Total Vanadium (V)	mg/kg	54.9	7047233	45.1	7046975	44.4	48.3	51.8	34.1	7047233	34.2	2.0	7046975
Total Zinc (Zn)	mg/kg	108	7047233	83.1	7046975	78.6	89.7	128	42.4	7047233	39.2	1.0	7046975
Total Zirconium (Zr)	mg/kg	1.75	7047233	1.60	7046975	1.79	1.16	1.77	2.40	7047233	3.21	0.50	7046975

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		HC0689		HC0690		HC0691	HC0692		HC0693		
Sampling Date		2013/08/01		2013/08/01		2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-118**	**QC Batch**	**SP-118B**	**QC Batch**	**SP-119**	**SP-120**	**QC Batch**	**SP-121**	**RDL**	**QC Batch**
Physical Properties											
Soluble (2:1) pH	pH Units	9.51	7046977	9.49	7047237	9.47	9.47	7046977	9.46	0.010	7047237
Total Metals by ICPMS											
Total Aluminum (Al)	mg/kg	8590	7046975	8630	7047233	9000	9290	7046975	8180	100	7047233
Total Antimony (Sb)	mg/kg	1.04	7046975	1.18	7047233	1.28	1.40	7046975	0.71	0.10	7047233
Total Arsenic (As)	mg/kg	5.50	7046975	4.82	7047233	7.36	7.63	7046975	5.87	0.50	7047233
Total Barium (Ba)	mg/kg	63.6	7046975	50.7	7047233	61.9	72.6	7046975	74.4	0.10	7047233
Total Beryllium (Be)	mg/kg	<0.40	7046975	<0.40	7047233	<0.40	<0.40	7046975	<0.40	0.40	7047233
Total Bismuth (Bi)	mg/kg	<0.10	7046975	<0.10	7047233	<0.10	<0.10	7046975	<0.10	0.10	7047233
Total Cadmium (Cd)	mg/kg	0.388	7046975	0.355	7047233	0.321	0.267	7046975	0.314	0.050	7047233
Total Calcium (Ca)	mg/kg	121000	7046975	109000	7047233	138000	154000	7046975	151000	100	7047233
Total Chromium (Cr)	mg/kg	15.8	7046975	13.7	7047233	13.1	13.2	7046975	11.1	1.0	7047233
Total Cobalt (Co)	mg/kg	5.97	7046975	5.64	7047233	7.86	7.20	7046975	6.37	0.30	7047233
Total Copper (Cu)	mg/kg	26.9	7046975	23.5	7047233	33.1	28.1	7046975	25.1	0.50	7047233
Total Iron (Fe)	mg/kg	15000	7046975	13300	7047233	15300	14800	7046975	13100	100	7047233
Total Lead (Pb)	mg/kg	34.5	7046975	31.4	7047233	36.9	36.4	7046975	48.0	0.10	7047233
Total Lithium (Li)	mg/kg	8.6	7046975	7.9	7047233	8.3	7.9	7046975	7.4	5.0	7047233
Total Magnesium (Mg)	mg/kg	36000	7046975	32700	7047233	32000	37000	7046975	48400	100	7047233
Total Manganese (Mn)	mg/kg	309	7046975	295	7047233	391	383	7046975	385	0.20	7047233
Total Mercury (Hg)	mg/kg	0.150	7046975	0.171	7047233	0.202	0.202	7046975	0.167	0.050	7047233
Total Molybdenum (Mo)	mg/kg	3.11	7046975	2.19	7047233	4.53	4.78	7046975	3.97	0.10	7047233
Total Nickel (Ni)	mg/kg	13.0	7046975	10.8	7047233	13.4	11.8	7046975	10.8	0.80	7047233
Total Phosphorus (P)	mg/kg	693	7046975	665	7047233	686	757	7046975	950	10	7047233
Total Potassium (K)	mg/kg	799	7046975	733	7047233	657	699	7046975	725	100	7047233
Total Selenium (Se)	mg/kg	<0.50	7046975	<0.50	7047233	<0.50	<0.50	7046975	<0.50	0.50	7047233
Total Silver (Ag)	mg/kg	<0.050	7046975	<0.050	7047233	<0.050	0.057	7046975	<0.050	0.050	7047233
Total Sodium (Na)	mg/kg	4500	7046975	4700	7047233	3820	5560	7046975	5570	100	7047233
Total Strontium (Sr)	mg/kg	627	7046975	578	7047233	702	826	7046975	826	0.10	7047233
Total Thallium (Tl)	mg/kg	0.093	7046975	0.091	7047233	0.066	0.052	7046975	<0.050	0.050	7047233
Total Tin (Sn)	mg/kg	4.04	7046975	5.89	7047233	4.89	2.97	7046975	3.76	0.10	7047233
Total Titanium (Ti)	mg/kg	586	7046975	565	7047233	525	520	7046975	416	1.0	7047233
Total Uranium (U)	mg/kg	2.03	7046975	1.78	7047233	2.60	2.76	7046975	2.82	0.050	7047233
Total Vanadium (V)	mg/kg	34.1	7046975	32.3	7047233	31.3	34.4	7046975	28.1	2.0	7047233
Total Zinc (Zn)	mg/kg	39.4	7046975	39.5	7047233	46.8	44.0	7046975	74.2	1.0	7047233
Total Zirconium (Zr)	mg/kg	2.72	7046975	2.60	7047233	2.15	2.24	7046975	1.82	0.50	7047233

RDL = Reportable Detection Limit

Maxxam

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HC0656		HC0657		HC0658		HC0659		HC0660			HC0661		
Sampling Date		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01			2013/08/01		
	UNITS	**SP-98**	**RDL**	**SP-98B**	**RDL**	**SP-99**	**RDL**	**SP-100**	**RDL**	**SP-101**	**RDL**	**QC Batch**	**SP-102**	**RDL**	**QC Batch**
ANIONS															
Soluble Chloride (Cl)	mg/L	8750	50	8090	50	16300	50	9720	50	9970	50	7056882	9680	50	7049901
Calculated Parameters															
Soluble Chloride (Cl)	mg/kg	3850	22	3870	24	8760	27	4980	26	4490	23	7046725	5370	28	7046725
Soluble Sodium (Na)	mg/kg	2130	2.2	2100	2.4	4750	2.7	2720	2.6	2430	2.3	7046727	2950	2.8	7046727
Soluble Parameters															
Saturation %	%	44.0	1.0	47.8	1.0	53.7	1.0	51.3	1.0	45.0	1.0	7046973	55.5	1.0	7046984
Wet Soluble Sodium (Na)	mg/L	4850	5.0	4390	5.0	8850	5.0	5310	5.0	5400	5.0	7049388	5320	5.0	7049398

Maxxam ID		HC0662		HC0663		HC0664		HC0665		HC0670		HC0671		HC0672		
Sampling Date		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01		
	UNITS	**SP-103**	**RDL**	**SP-103B**	**RDL**	**SP-104**	**RDL**	**SP-105**	**RDL**	**SP-106**	**RDL**	**SP-107**	**RDL**	**SP-108**	**RDL**	**QC Batch**
ANIONS																
Soluble Chloride (Cl)	mg/L	7630	50	9400	50	8580	50	9010	50	509	5.0	1060	50	7930	50	7049901
Calculated Parameters																
Soluble Chloride (Cl)	mg/kg	4990	33	4820	26	3920	23	4470	25	230	2.3	450	21	4630	29	7046725
Soluble Sodium (Na)	mg/kg	2790	3.3	2660	2.6	2090	2.3	2370	2.5	79.6	2.3	202	2.1	2390	2.9	7046727
Soluble Parameters																
Saturation %	%	65.3	1.0	51.3	1.0	45.6	1.0	49.7	1.0	45.1	1.0	42.3	1.0	58.4	1.0	7046984
Wet Soluble Sodium (Na)	mg/L	4270	5.0	5180	5.0	4590	5.0	4780	5.0	176	5.0	477	5.0	4080	5.0	7049398

Maxxam ID		HC0673		HC0674		HC0675		HC0676		HC0677		HC0678		
Sampling Date		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01		2013/08/01		
	UNITS	**SP-109**	**RDL**	**SP-110**	**RDL**	**SP-110B**	**RDL**	**SP-111**	**RDL**	**SP-112**	**RDL**	**SP-113**	**RDL**	**QC Batch**
ANIONS														
Soluble Chloride (Cl)	mg/L	7240	50	3610	50	2360	50	1920	50	8190	50	7710	50	7049901
Calculated Parameters														
Soluble Chloride (Cl)	mg/kg	4160	29	1840	25	1300	28	995	26	4580	28	4630	30	7046725
Soluble Sodium (Na)	mg/kg	2130	2.9	797	2.5	608	2.8	462	2.6	2310	2.8	2470	3.0	7046727
Soluble Parameters														
Saturation %	%	57.5	1.0	50.8	1.0	55.2	1.0	51.8	1.0	55.9	1.0	60.0	1.0	7046984
Wet Soluble Sodium (Na)	mg/L	3700	5.0	1570	5.0	1100	5.0	890	5.0	4120	5.0	4110	5.0	7049398

RDL = Reportable Detection Limit

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

SOLUBLE SODIUM AND CHLORIDE IN SOIL (SOIL)

Maxxam ID		HC0679		HC0686		HC0687		HC0688	HC0689		
Sampling Date		2013/08/01		2013/08/01		2013/08/01		2013/08/01	2013/08/01		
	UNITS	**SP-114**	**RDL**	**SP-115**	**RDL**	**SP-116**	**RDL**	**SP-117**	**SP-118**	**RDL**	**QC Batch**
ANIONS											
Soluble Chloride (Cl)	mg/L	7700	50	7490	50	9260	50	9220	10100	50	7049901
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	4950	32	4520	30	5660	31	5520	6070	30	7046725
Soluble Sodium (Na)	mg/kg	2640	3.2	2420	3.0	3110	3.1	3000	3400	3.0	7046727
Soluble Parameters											
Saturation %	%	64.3	1.0	60.4	1.0	61.1	1.0	59.9	60.1	1.0	7046984
Wet Soluble Sodium (Na)	mg/L	4110	5.0	4010	5.0	5080	5.0	5000	5650	5.0	7049398

Maxxam ID		HC0690			HC0691		HC0692		HC0693		
Sampling Date		2013/08/01			2013/08/01		2013/08/01		2013/08/01		
	UNITS	**SP-118B**	**RDL**	**QC Batch**	**SP-119**	**RDL**	**SP-120**	**RDL**	**SP-121**	**RDL**	**QC Batch**
ANIONS											
Soluble Chloride (Cl)	mg/L	8490	50	7049901	8880	50	9780	50	10400	50	7056921
Calculated Parameters											
Soluble Chloride (Cl)	mg/kg	5020	30	7046725	7150	40	7510	38	8130	39	7046725
Soluble Sodium (Na)	mg/kg	2880	3.0	7046727	3690	4.0	4090	3.8	4320	3.9	7046727
Soluble Parameters											
Saturation %	%	59.1	1.0	7046984	80.5	1.0	76.8	1.0	78.1	1.0	7048219
Wet Soluble Sodium (Na)	mg/L	4880	5.0	7049398	4590	5.0	5330	5.0	5530	5.0	7049403

RDL = Reportable Detection Limit

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0656		HC0657		HC0658	HC0659		HC0660		
Sampling Date		2013/08/01		2013/08/01		2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-98**	**QC Batch**	**SP-98B**	**QC Batch**	**SP-99**	**SP-100**	**QC Batch**	**SP-101**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	6.1	7044898	8.6	7044898	2.0	6.7	7044898	7.2	0.10	7044898
Benzo[a]pyrene equivalency	N/A	0.47	7044898	0.68	7044898	0.16	0.52	7044898	0.55	0.10	7044898
Polycyclic Aromatics											
Naphthalene	mg/kg	0.015	7058920	0.016	7058970	<0.010	0.018	7058920	0.013	0.010	7058970
2-Methylnaphthalene	mg/kg	<0.020	7058920	<0.020	7058970	<0.020	<0.020	7058920	<0.020	0.020	7058970
Acenaphthylene	mg/kg	0.013	7058920	0.018	7058970	0.0074	0.013	7058920	0.017	0.0050	7058970
Acenaphthene	mg/kg	0.021	7058920	0.028	7058970	0.0081	0.030	7058920	0.025	0.0050	7058970
Fluorene	mg/kg	0.033	7058920	0.043	7058970	<0.020	0.046	7058920	0.037	0.020	7058970
Phenanthrene	mg/kg	0.40	7058920	0.57	7058970	0.11	0.45	7058920	0.48	0.020	7058970
Anthracene	mg/kg	0.11	7058920	0.16	7058970	0.027	0.14	7058920	0.13	0.0040	7058970
Fluoranthene	mg/kg	0.78	7058920	1.1	7058970	0.19	0.78	7058920	0.91	0.020	7058970
Pyrene	mg/kg	0.57	7058920	0.85	7058970	0.16	0.61	7058920	0.67	0.020	7058970
Benzo(a)anthracene	mg/kg	0.37	7058920	0.52	7058970	0.11	0.41	7058920	0.43	0.020	7058970
Chrysene	mg/kg	0.43	7058920	0.59	7058970	0.15	0.46	7058920	0.49	0.020	7058970
Benzo(b&j)fluoranthene	mg/kg	0.43	7058920	0.64	7058970	0.15	0.47	7058920	0.55	0.020	7058970
Benzo(b)fluoranthene	mg/kg	0.28	7058920	0.43	7058970	0.093	0.29	7058920	0.37	0.020	7058970
Benzo(k)fluoranthene	mg/kg	0.16	7058920	0.17	7058970	0.050	0.17	7058920	0.15	0.020	7058970
Benzo(a)pyrene	mg/kg	0.30	7058920	0.43	7058970	0.098	0.33	7058920	0.35	0.020	7058970
Indeno(1,2,3-cd)pyrene	mg/kg	0.15	7058920	0.24	7058970	0.052	0.16	7058920	0.20	0.050	7058970
Dibenz(a,h)anthracene	mg/kg	0.055	7058920	0.075	7058970	<0.050	0.062	7058920	0.059	0.050	7058970
Benzo(g,h,i)perylene	mg/kg	0.17	7058920	0.26	7058970	0.064	0.18	7058920	0.22	0.050	7058970
Low Molecular Weight PAH`s	mg/kg	0.59	7044333	0.84	7044333	0.15	0.69	7044333	0.70	0.050	7044333
High Molecular Weight PAH`s	mg/kg	3.7	7044333	5.3	7044333	1.1	3.9	7044333	4.4	0.050	7044333
Total PAH	mg/kg	4.3	7044333	6.2	7044333	1.3	4.6	7044333	5.1	0.050	7044333
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	92	7058920	80	7058970	90	94	7058920	82		7058970
D8-ACENAPHTHYLENE (sur.)	%	88	7058920	80	7058970	84	87	7058920	83		7058970
D8-NAPHTHALENE (sur.)	%	89	7058920	83	7058970	86	88	7058920	84		7058970
TERPHENYL-D14 (sur.)	%	91	7058920	83	7058970	89	87	7058920	85		7058970

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0661			HC0662	HC0663		HC0664		HC0665		
Sampling Date		2013/08/01			2013/08/01	2013/08/01		2013/08/01		2013/08/01		
	UNITS	**SP-102**	**RDL**	**QC Batch**	**SP-103**	**SP-103B**	**RDL**	**SP-104**	**RDL**	**SP-105**	**RDL**	**QC Batch**
Calculated Parameters												
Index of Additive Cancer Risk(IARC)	N/A	26	0.10	7044898	6.0	6.6	0.10	7.9	0.10	7.4	0.10	7044898
Benzo[a]pyrene equivalency	N/A	2.0	0.10	7044898	0.46	0.52	0.10	0.62	0.10	0.58	0.10	7044898
Polycyclic Aromatics												
Naphthalene	mg/kg	0.028	0.010	7058970	0.019	0.018	0.010	<0.050(1)	0.050	0.041	0.010	7058920
2-Methylnaphthalene	mg/kg	<0.030(2)	0.030	7058970	<0.020	<0.020	0.020	<0.10(1)	0.10	<0.020	0.020	7058920
Acenaphthylene	mg/kg	0.065	0.0050	7058970	0.014	0.014	0.0050	0.15(1)	0.025	0.010	0.0050	7058920
Acenaphthene	mg/kg	0.041	0.0050	7058970	0.027	0.025	0.0050	0.10(1)	0.025	0.033	0.0050	7058920
Fluorene	mg/kg	0.10	0.020	7058970	0.042	0.041	0.020	0.21(1)	0.10	0.048	0.020	7058920
Phenanthrene	mg/kg	0.99	0.020	7058970	0.45	0.45	0.020	2.7(1)	0.10	0.56	0.020	7058920
Anthracene	mg/kg	0.59	0.0040	7058970	0.14	0.13	0.0040	0.66(1)	0.020	0.13	0.0040	7058920
Fluoranthene	mg/kg	2.6	0.020	7058970	0.94	0.83	0.020	3.2(1)	0.10	0.99	0.020	7058920
Pyrene	mg/kg	1.7	0.020	7058970	0.70	0.63	0.020	2.3(1)	0.10	0.73	0.020	7058920
Benzo(a)anthracene	mg/kg	1.7	0.020	7058970	0.38	0.38	0.020	0.66(1)	0.10	0.44	0.020	7058920
Chrysene	mg/kg	2.2	0.020	7058970	0.41	0.44	0.020	0.76(1)	0.10	0.50	0.020	7058920
Benzo(b&j)fluoranthene	mg/kg	1.9	0.020	7058970	0.44	0.47	0.020	0.49(1)	0.10	0.56	0.020	7058920
Benzo(b)fluoranthene	mg/kg	1.3	0.020	7058970	0.29	0.30	0.020	0.31(1)	0.10	0.38	0.020	7058920
Benzo(k)fluoranthene	mg/kg	0.56	0.020	7058970	0.13	0.17	0.020	0.14(1)	0.10	0.15	0.020	7058920
Benzo(a)pyrene	mg/kg	1.2	0.020	7058970	0.29	0.34	0.020	0.34(1)	0.10	0.38	0.020	7058920
Indeno(1,2,3-cd)pyrene	mg/kg	0.64	0.050	7058970	0.14	0.17	0.050	<0.25(1)	0.25	0.19	0.050	7058920
Dibenz(a,h)anthracene	mg/kg	0.25	0.050	7058970	0.054	0.060	0.050	<0.25(1)	0.25	0.066	0.050	7058920
Benzo(g,h,i)perylene	mg/kg	0.64	0.050	7058970	0.16	0.19	0.050	<0.25(1)	0.25	0.22	0.050	7058920
Low Molecular Weight PAH`s	mg/kg	1.8	0.050	7044333	0.70	0.67	0.050	3.8	0.25	0.82	0.050	7044333
High Molecular Weight PAH`s	mg/kg	15	0.050	7044333	3.9	4.0	0.050	8.1	0.25	4.6	0.050	7044333
Total PAH	mg/kg	16	0.050	7044333	4.6	4.7	0.050	12	0.25	5.4	0.050	7044333
Surrogate Recovery (%)												
D10-ANTHRACENE (sur.)	%	78		7058970	88	84		90		94		7058920
D8-ACENAPHTHYLENE (sur.)	%	79		7058970	86	83		90		89		7058920
D8-NAPHTHALENE (sur.)	%	82		7058970	86	84		89		92		7058920
TERPHENYL-D14 (sur.)	%	77		7058970	85	81		90		90		7058920

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.
(2) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0670		HC0671	HC0672	HC0673	HC0674		HC0675		
Sampling Date		2013/08/01		2013/08/01	2013/08/01	2013/08/01	2013/08/01		2013/08/01		
	UNITS	**SP-106**	**RDL**	**SP-107**	**SP-108**	**SP-109**	**SP-110**	**QC Batch**	**SP-110B**	**RDL**	**QC Batch**
Calculated Parameters											
Index of Additive Cancer Risk(IARC)	N/A	1.1	0.10	0.51	2.1	1.1	1.4	7044898	1.3	0.10	7044898
Benzo[a]pyrene equivalency	N/A	<0.10	0.10	<0.10	0.16	<0.10	0.12	7044898	0.11	0.10	7044898
Polycyclic Aromatics											
Naphthalene	mg/kg	0.011	0.010	<0.010	0.013	<0.010	<0.010	7058920	<0.010	0.010	7058970
2-Methylnaphthalene	mg/kg	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	7058920	<0.020	0.020	7058970
Acenaphthylene	mg/kg	0.0096	0.0050	0.0056	0.011	0.0073	0.015	7058920	0.017	0.0050	7058970
Acenaphthene	mg/kg	0.032	0.0050	0.0054	0.011	0.0057	0.0076	7058920	0.0067	0.0050	7058970
Fluorene	mg/kg	0.034	0.020	<0.020	<0.020	<0.020	<0.020	7058920	<0.020	0.020	7058970
Phenanthrene	mg/kg	0.10	0.020	0.024	0.12	0.054	0.065	7058920	0.035	0.020	7058970
Anthracene	mg/kg	0.020	0.0040	0.0081	0.032	0.015	0.017	7058920	0.015	0.0040	7058970
Fluoranthene	mg/kg	0.13	0.020	0.041	0.26	0.11	0.11	7058920	0.072	0.020	7058970
Pyrene	mg/kg	0.11	0.020	0.037	0.21	0.095	0.10	7058920	0.066	0.020	7058970
Benzo(a)anthracene	mg/kg	0.045	0.020	<0.020	0.12	0.048	0.060	7058920	0.049	0.020	7058970
Chrysene	mg/kg	<0.070(1)	0.070	0.028	0.14	0.059	0.086	7058920	0.069	0.020	7058970
Benzo(b&j)fluoranthene	mg/kg	0.084	0.020	0.036	0.16	0.075	0.11	7058920	0.11	0.020	7058970
Benzo(b)fluoranthene	mg/kg	0.054	0.020	0.023	0.10	0.047	0.070	7058920	0.066	0.020	7058970
Benzo(k)fluoranthene	mg/kg	0.023	0.020	<0.020	0.046	0.028	0.033	7058920	0.033	0.020	7058970
Benzo(a)pyrene	mg/kg	0.055	0.020	0.022	0.10	0.050	0.068	7058920	0.065	0.020	7058970
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	7058920	<0.050	0.050	7058970
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	7058920	<0.050	0.050	7058970
Benzo(g,h,i)perylene	mg/kg	<0.050	0.050	<0.050	0.051	<0.050	<0.050	7058920	<0.050	0.050	7058970
Low Molecular Weight PAH`s	mg/kg	0.21	0.050	<0.050	0.19	0.082	0.10	7044333	0.074	0.050	7044333
High Molecular Weight PAH`s	mg/kg	0.51	0.070	0.19	1.2	0.51	0.64	7044333	0.52	0.050	7044333
Total PAH	mg/kg	0.71	0.070	0.23	1.4	0.59	0.74	7044333	0.60	0.050	7044333
Surrogate Recovery (%)											
D10-ANTHRACENE (sur.)	%	97		100	95	99	83	7058920	78		7058970
D8-ACENAPHTHYLENE (sur.)	%	92		94	90	89	83	7058920	77		7058970
D8-NAPHTHALENE (sur.)	%	93		95	90	91	86	7058920	79		7058970
TERPHENYL-D14 (sur.)	%	97		98	94	96	85	7058920	82		7058970

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0676		HC0677	HC0678	HC0679		HC0686			HC0687		
Sampling Date		2013/08/01		2013/08/01	2013/08/01	2013/08/01		2013/08/01			2013/08/01		
	UNITS	**SP-111**	**QC Batch**	**SP-112**	**SP-113**	**SP-114**	**RDL**	**SP-115**	**RDL**	**QC Batch**	**SP-116**	**RDL**	**QC Batch**
Calculated Parameters													
Index of Additive Cancer Risk(IARC)	N/A	0.89	7044898	1.1	1.3	1.3	0.10	1.4	0.10	7044898	8.7	0.10	7044898
Benzo[a]pyrene equivalency	N/A	<0.10	7044898	<0.10	0.10	0.11	0.10	0.11	0.10	7044898	0.67	0.10	7044898
Polycyclic Aromatics													
Naphthalene	mg/kg	0.043	7058920	<0.010	0.011	0.015	0.010	0.022	0.010	7058970	0.037	0.010	7049312
2-Methylnaphthalene	mg/kg	0.062	7058920	<0.020	<0.020	<0.020	0.020	<0.030(1)	0.030	7058970	<0.020	0.020	7049312
Acenaphthylene	mg/kg	0.0085	7058920	0.0088	0.0077	0.010	0.0050	0.0086	0.0050	7058970	0.023	0.0050	7049312
Acenaphthene	mg/kg	0.0088	7058920	0.0080	0.0060	0.0078	0.0050	0.0091	0.0050	7058970	0.029	0.0050	7049312
Fluorene	mg/kg	<0.020	7058920	<0.020	<0.020	<0.020	0.020	<0.020	0.020	7058970	0.043	0.020	7049312
Phenanthrene	mg/kg	0.056	7058920	0.066	0.079	0.077	0.020	0.098	0.020	7058970	0.39	0.020	7049312
Anthracene	mg/kg	0.0098	7058920	0.019	0.022	0.025	0.0040	0.030	0.0040	7058970	0.16	0.0040	7049312
Fluoranthene	mg/kg	0.062	7058920	0.11	0.14	0.15	0.020	0.19	0.020	7058970	0.82	0.020	7049312
Pyrene	mg/kg	0.055	7058920	0.097	0.12	0.13	0.020	0.16	0.020	7058970	0.61	0.020	7049312
Benzo(a)anthracene	mg/kg	0.035	7058920	0.048	0.062	0.058	0.020	0.075	0.020	7058970	0.49	0.020	7049312
Chrysene	mg/kg	0.049	7058920	0.063	0.077	0.075	0.020	0.093	0.020	7058970	0.58	0.020	7049312
Benzo(b&j)fluoranthene	mg/kg	0.061	7058920	0.078	0.098	0.097	0.020	0.099	0.020	7058970	0.63	0.020	7049312
Benzo(b)fluoranthene	mg/kg	0.037	7058920	0.050	0.065	0.063	0.020	0.064	0.020	7058970	0.40	0.020	7049312
Benzo(k)fluoranthene	mg/kg	0.023	7058920	0.023	0.026	0.031	0.020	0.032	0.020	7058970	0.22	0.020	7049312
Benzo(a)pyrene	mg/kg	0.040	7058920	0.049	0.055	0.059	0.020	0.058	0.020	7058970	0.41	0.020	7049312
Indeno(1,2,3-cd)pyrene	mg/kg	<0.050	7058920	<0.050	<0.050	<0.050	0.050	<0.050	0.050	7058970	0.22	0.050	7049312
Dibenz(a,h)anthracene	mg/kg	<0.050	7058920	<0.050	<0.050	<0.050	0.050	<0.050	0.050	7058970	0.091	0.050	7049312
Benzo(g,h,i)perylene	mg/kg	<0.050	7058920	<0.050	<0.050	<0.050	0.050	<0.050	0.050	7058970	0.24	0.050	7049312
Low Molecular Weight PAH`s	mg/kg	0.19	7044333	0.10	0.13	0.14	0.050	0.17	0.050	7044333	0.68	0.050	7044333
High Molecular Weight PAH`s	mg/kg	0.36	7044333	0.52	0.64	0.66	0.050	0.77	0.050	7044333	4.7	0.050	7044333
Total PAH	mg/kg	0.55	7044333	0.62	0.77	0.79	0.050	0.94	0.050	7044333	5.4	0.050	7044333
Surrogate Recovery (%)													
D10-ANTHRACENE (sur.)	%	98	7058920	79	74	83		77		7058970	91		7049312
D8-ACENAPHTHYLENE (sur.)	%	90	7058920	77	74	73		76		7058970	91		7049312
D8-NAPHTHALENE (sur.)	%	94	7058920	80	76	79		77		7058970	90		7049312
TERPHENYL-D14 (sur.)	%	96	7058920	83	77	83		80		7058970	85		7049312

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0688		HC0689			HC0690		
Sampling Date		2013/08/01		2013/08/01			2013/08/01		
	UNITS	**SP-117**	**RDL**	**SP-118**	**RDL**	**QC Batch**	**SP-118B**	**RDL**	**QC Batch**
Calculated Parameters									
Index of Additive Cancer Risk(IARC)	N/A	5.7	0.10	14	0.10	7044898	6.3	0.10	7044898
Benzo[a]pyrene equivalency	N/A	0.41	0.10	1.1	0.10	7044898	0.48	0.10	7044898
Polycyclic Aromatics									
Naphthalene	mg/kg	0.017	0.010	0.028	0.010	7058970	0.023	0.010	7058920
2-Methylnaphthalene	mg/kg	<0.030(1)	0.030	<0.040(1)	0.040	7058970	<0.020	0.020	7058920
Acenaphthylene	mg/kg	0.013	0.0050	0.033	0.0050	7058970	0.019	0.0050	7058920
Acenaphthene	mg/kg	0.028	0.0050	0.039	0.0050	7058970	0.026	0.0050	7058920
Fluorene	mg/kg	0.040	0.020	0.068	0.020	7058970	0.038	0.020	7058920
Phenanthrene	mg/kg	0.47	0.020	0.80	0.020	7058970	0.40	0.020	7058920
Anthracene	mg/kg	0.12	0.0040	0.28	0.0040	7058970	0.11	0.0040	7058920
Fluoranthene	mg/kg	0.90	0.020	1.7	0.020	7058970	0.84	0.020	7058920
Pyrene	mg/kg	0.68	0.020	1.4	0.020	7058970	0.65	0.020	7058920
Benzo(a)anthracene	mg/kg	0.35	0.020	0.86	0.020	7058970	0.36	0.020	7058920
Chrysene	mg/kg	0.42	0.020	1.0	0.020	7058970	0.42	0.020	7058920
Benzo(b&j)fluoranthene	mg/kg	0.43	0.020	1.1	0.020	7058970	0.46	0.020	7058920
Benzo(b)fluoranthene	mg/kg	0.28	0.020	0.70	0.020	7058970	0.29	0.020	7058920
Benzo(k)fluoranthene	mg/kg	0.13	0.020	0.30	0.020	7058970	0.17	0.020	7058920
Benzo(a)pyrene	mg/kg	0.28	0.020	0.70	0.020	7058970	0.31	0.020	7058920
Indeno(1,2,3-cd)pyrene	mg/kg	0.14	0.050	0.37	0.050	7058970	0.14	0.050	7058920
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	0.13	0.050	7058970	0.052	0.050	7058920
Benzo(g,h,i)perylene	mg/kg	0.16	0.050	0.40	0.050	7058970	0.15	0.050	7058920
Low Molecular Weight PAH`s	mg/kg	0.69	0.050	1.2	0.050	7044333	0.61	0.050	7044333
High Molecular Weight PAH`s	mg/kg	3.8	0.050	8.6	0.050	7044333	3.8	0.050	7044333
Total PAH	mg/kg	4.5	0.050	9.8	0.050	7044333	4.5	0.050	7044333
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	76		88		7058970	89		7058920
D8-ACENAPHTHYLENE (sur.)	%	77		82		7058970	83		7058920
D8-NAPHTHALENE (sur.)	%	77		85		7058970	85		7058920
TERPHENYL-D14 (sur.)	%	72		81		7058970	80		7058920

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - RDL raised due to sample matrix interference.

Maxxam

Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		HC0691			HC0692			HC0693		
Sampling Date		2013/08/01			2013/08/01			2013/08/01		
	UNITS	**SP-119**	**RDL**	**QC Batch**	**SP-120**	**RDL**	**QC Batch**	**SP-121**	**RDL**	**QC Batch**
Calculated Parameters										
Index of Additive Cancer Risk(IARC)	N/A	4.1	0.10	7044898	8.0	0.10	7044898	5.2	0.10	7044898
Benzo[a]pyrene equivalency	N/A	0.31	0.10	7044898	0.61	0.10	7044898	0.38	0.10	7044898
Polycyclic Aromatics										
Naphthalene	mg/kg	0.021	0.010	7058970	0.076(1)	0.010	7058698	0.023	0.010	7058970
2-Methylnaphthalene	mg/kg	<0.030(2)	0.030	7058970	0.032	0.020	7058698	<0.030(2)	0.030	7058970
Acenaphthylene	mg/kg	0.014	0.0050	7058970	0.021	0.0050	7058698	0.017	0.0050	7058970
Acenaphthene	mg/kg	0.017	0.0050	7058970	0.036	0.0050	7058698	0.034	0.0050	7058970
Fluorene	mg/kg	0.025	0.020	7058970	0.058	0.020	7058698	0.050	0.020	7058970
Phenanthrene	mg/kg	0.29	0.020	7058970	0.54	0.020	7058698	0.47	0.020	7058970
Anthracene	mg/kg	0.086	0.0040	7058970	0.14	0.0040	7058698	0.13	0.0040	7058970
Fluoranthene	mg/kg	0.58	0.020	7058970	1.1	0.020	7058698	0.83	0.020	7058970
Pyrene	mg/kg	0.46	0.020	7058970	0.85	0.020	7058698	0.63	0.020	7058970
Benzo(a)anthracene	mg/kg	0.24	0.020	7058970	0.46	0.020	7058698	0.33	0.020	7058970
Chrysene	mg/kg	0.28	0.020	7058970	0.58	0.020	7058698	0.38	0.020	7058970
Benzo(b&j)fluoranthene	mg/kg	0.31	0.020	7058970	0.57	0.020	7058698	0.39	0.020	7058970
Benzo(b)fluoranthene	mg/kg	0.20	0.020	7058970	0.36	0.020	7058698	0.25	0.020	7058970
Benzo(k)fluoranthene	mg/kg	0.086	0.020	7058970	0.21	0.020	7058698	0.12	0.020	7058970
Benzo(a)pyrene	mg/kg	0.20	0.020	7058970	0.39	0.020	7058698	0.25	0.020	7058970
Indeno(1,2,3-cd)pyrene	mg/kg	0.10	0.050	7058970	0.19	0.050	7058698	0.12	0.050	7058970
Dibenz(a,h)anthracene	mg/kg	<0.050	0.050	7058970	0.067	0.050	7058698	<0.050	0.050	7058970
Benzo(g,h,i)perylene	mg/kg	0.12	0.050	7058970	0.22	0.050	7058698	0.14	0.050	7058970
Low Molecular Weight PAH`s	mg/kg	0.45	0.050	7044333	0.91	0.050	7044333	0.72	0.050	7044333
High Molecular Weight PAH`s	mg/kg	2.6	0.050	7044333	5.0	0.050	7044333	3.4	0.050	7044333
Total PAH	mg/kg	3.0	0.050	7044333	5.9	0.050	7044333	4.2	0.050	7044333
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	82		7058970	95		7058698	79		7058970
D8-ACENAPHTHYLENE (sur.)	%	81		7058970	88		7058698	80		7058970
D8-NAPHTHALENE (sur.)	%	80		7058970	91		7058698	81		7058970
TERPHENYL-D14 (sur.)	%	80		7058970	82		7058698	75		7058970

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) - Duplicate exceeds acceptance criteria due to sample matrix.
(2) - RDL raised due to sample matrix interference.

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

Package 1	5.0°C
Package 2	5.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam

Success Through Science®

Maxxam Job #: B367167
Report Date: 2013/08/09

SLR CONSULTING (CANADA) LTD
Client Project #: 205.03633.00000
Site Location: COLWOOD 43
Your P.O. #: 700261278
Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7046740	Moisture	2013/08/06					<0.30	%	2.5	20		
7046743	Moisture	2013/08/07					<0.30	%	1.9	20		
7046794	Moisture	2013/08/06					<0.30	%	2.9	20		
7046973	Saturation %	2013/08/03			101	80 - 120	<1.0	%	0.04	30		
7046975	Total Antimony (Sb)	2013/08/07	96	75 - 125	102	75 - 125	<0.10	mg/kg	NC	30	91	70 - 130
7046975	Total Arsenic (As)	2013/08/07	98	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30	94	70 - 130
7046975	Total Barium (Ba)	2013/08/07	NC	75 - 125	113	75 - 125	<0.10	mg/kg	11.5	35	109	70 - 130
7046975	Total Beryllium (Be)	2013/08/07	103	75 - 125	109	75 - 125	<0.40	mg/kg	NC	30		
7046975	Total Cadmium (Cd)	2013/08/07	99	75 - 125	110	75 - 125	<0.050	mg/kg	NC	30	102	70 - 130
7046975	Total Chromium (Cr)	2013/08/07	104	75 - 125	111	75 - 125	<1.0	mg/kg	NC	30	102	70 - 130
7046975	Total Cobalt (Co)	2013/08/07	105	75 - 125	113	75 - 125	<0.30	mg/kg	1.1	30	97	70 - 130
7046975	Total Copper (Cu)	2013/08/07	98	75 - 125	111	75 - 125	<0.50	mg/kg	NC	30	91	70 - 130
7046975	Total Lead (Pb)	2013/08/07	102	75 - 125	110	75 - 125	<0.10	mg/kg	3.6	35	101	70 - 130
7046975	Total Lithium (Li)	2013/08/07	100	75 - 125	104	75 - 125	<5.0	mg/kg	NC	30		
7046975	Total Manganese (Mn)	2013/08/07	NC	75 - 125	111	75 - 125	<0.20	mg/kg	7.6	30	99	70 - 130
7046975	Total Mercury (Hg)	2013/08/07	101	75 - 125	106	75 - 125	<0.050	mg/kg	NC	35	95	70 - 130
7046975	Total Molybdenum (Mo)	2013/08/07	103	75 - 125	104	75 - 125	<0.10	mg/kg	NC	35	96	70 - 130
7046975	Total Nickel (Ni)	2013/08/07	101	75 - 125	110	75 - 125	<0.80	mg/kg	4.0	30	92	70 - 130
7046975	Total Selenium (Se)	2013/08/07	104	75 - 125	111	75 - 125	<0.50	mg/kg	NC	30		
7046975	Total Silver (Ag)	2013/08/07	97	75 - 125	96	75 - 125	<0.050	mg/kg	NC	35		
7046975	Total Strontium (Sr)	2013/08/07	97	75 - 125	106	75 - 125	<0.10	mg/kg	11.2	35	98	70 - 130
7046975	Total Thallium (Tl)	2013/08/07	94	75 - 125	105	75 - 125	<0.050	mg/kg	NC	30	86	70 - 130
7046975	Total Tin (Sn)	2013/08/07	93	75 - 125	102	75 - 125	<0.10	mg/kg	NC	35		
7046975	Total Titanium (Ti)	2013/08/07	NC	75 - 125	103	75 - 125	<1.0	mg/kg	4.7	35	105	70 - 130
7046975	Total Uranium (U)	2013/08/07	102	75 - 125	108	75 - 125	<0.050	mg/kg	0.9	30	99	70 - 130
7046975	Total Vanadium (V)	2013/08/07	104	75 - 125	105	75 - 125	<2.0	mg/kg	NC	30	102	70 - 130
7046975	Total Zinc (Zn)	2013/08/07	100	75 - 125	113	75 - 125	<1.0	mg/kg	6.6	30	92	70 - 130
7046975	Total Aluminum (Al)	2013/08/07					<100	mg/kg	5.3	35	94	70 - 130
7046975	Total Calcium (Ca)	2013/08/07					<100	mg/kg	0.6	30	94	70 - 130
7046975	Total Iron (Fe)	2013/08/07					<100	mg/kg	5.7	30	94	70 - 130
7046975	Total Magnesium (Mg)	2013/08/07					<100	mg/kg	2.7	30	85	70 - 130
7046975	Total Phosphorus (P)	2013/08/07					<10	mg/kg	32.1(1)	30	86	70 - 130
7046975	Total Bismuth (Bi)	2013/08/07					<0.10	mg/kg	NC	30		
7046975	Total Potassium (K)	2013/08/07					<100	mg/kg	NC	35		
7046975	Total Sodium (Na)	2013/08/07					<100	mg/kg	NC	35		
7046975	Total Zirconium (Zr)	2013/08/07					<0.50	mg/kg	NC	30		
7046977	Soluble (2:1) pH	2013/08/07			100	97 - 103			0.5	20		
7046984	Saturation %	2013/08/03			101	80 - 120	<1.0	%	3.0	30		
7047233	Total Antimony (Sb)	2013/08/06	102	75 - 125	98	75 - 125	<0.10	mg/kg	NC	30	96	70 - 130

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Your P.O. #: 700261278
Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7047233	Total Arsenic (As)	2013/08/06	104	75 - 125	100	75 - 125	<0.50	mg/kg	NC	30	93	70 - 130
7047233	Total Barium (Ba)	2013/08/06	NC	75 - 125	104	75 - 125	<0.10	mg/kg	3.7	35	100	70 - 130
7047233	Total Beryllium (Be)	2013/08/06	109	75 - 125	104	75 - 125	<0.40	mg/kg	NC	30		
7047233	Total Cadmium (Cd)	2013/08/06	108	75 - 125	106	75 - 125	<0.050	mg/kg	NC	30	100	70 - 130
7047233	Total Chromium (Cr)	2013/08/06	108	75 - 125	111	75 - 125	<1.0	mg/kg	NC	30	99	70 - 130
7047233	Total Cobalt (Co)	2013/08/06	108	75 - 125	105	75 - 125	<0.30	mg/kg	0.3	30	94	70 - 130
7047233	Total Copper (Cu)	2013/08/06	106	75 - 125	105	75 - 125	<0.50	mg/kg	NC	30	91	70 - 130
7047233	Total Lead (Pb)	2013/08/06	106	75 - 125	104	75 - 125	<0.10	mg/kg	14.6	35	98	70 - 130
7047233	Total Lithium (Li)	2013/08/06	104	75 - 125	103	75 - 125	<5.0	mg/kg	NC	30		
7047233	Total Manganese (Mn)	2013/08/06	NC	75 - 125	106	75 - 125	<0.20	mg/kg	6.3	30	97	70 - 130
7047233	Total Mercury (Hg)	2013/08/06	107	75 - 125	101	75 - 125	<0.050	mg/kg	NC	35	78	70 - 130
7047233	Total Molybdenum (Mo)	2013/08/06	104	75 - 125	99	75 - 125	<0.10	mg/kg	NC	35	99	70 - 130
7047233	Total Nickel (Ni)	2013/08/06	104	75 - 125	103	75 - 125	<0.80	mg/kg	7.8	30	92	70 - 130
7047233	Total Selenium (Se)	2013/08/06	114	75 - 125	109	75 - 125	<0.50	mg/kg	NC	30		
7047233	Total Silver (Ag)	2013/08/06	96	75 - 125	91	75 - 125	<0.050	mg/kg	NC	35		
7047233	Total Strontium (Sr)	2013/08/06	106	75 - 125	101	75 - 125	<0.10	mg/kg	4.8	35	96	70 - 130
7047233	Total Thallium (Tl)	2013/08/06	96	75 - 125	98	75 - 125	<0.050	mg/kg	NC	30	89	70 - 130
7047233	Total Tin (Sn)	2013/08/06	100	75 - 125	99	75 - 125	<0.10	mg/kg	NC	35		
7047233	Total Titanium (Ti)	2013/08/06	NC	75 - 125	98	75 - 125	<1.0	mg/kg	0.5	35	93	70 - 130
7047233	Total Uranium (U)	2013/08/06	106	75 - 125	102	75 - 125	<0.050	mg/kg	1.8	30	93	70 - 130
7047233	Total Vanadium (V)	2013/08/06	105	75 - 125	100	75 - 125	<2.0	mg/kg	NC	30	93	70 - 130
7047233	Total Zinc (Zn)	2013/08/06	109	75 - 125	112	75 - 125	<1.0	mg/kg	10.6	30	91	70 - 130
7047233	Total Aluminum (Al)	2013/08/06					<100	mg/kg	1.4	35	93	70 - 130
7047233	Total Calcium (Ca)	2013/08/06					<100	mg/kg	7.8	30	93	70 - 130
7047233	Total Iron (Fe)	2013/08/06					<100	mg/kg	11.2	30	91	70 - 130
7047233	Total Magnesium (Mg)	2013/08/06					<100	mg/kg	6.8	30	87	70 - 130
7047233	Total Phosphorus (P)	2013/08/06					<10	mg/kg	6.6	30	86	70 - 130
7047233	Total Bismuth (Bi)	2013/08/06					<0.10	mg/kg	NC	30		
7047233	Total Potassium (K)	2013/08/06					<100	mg/kg	NC	35		
7047233	Total Sodium (Na)	2013/08/06					<100	mg/kg	NC	35		
7047233	Total Zirconium (Zr)	2013/08/06					<0.50	mg/kg	NC	30		
7047237	Soluble (2:1) pH	2013/08/06			99	97 - 103			0.8	20		
7047637	Moisture	2013/08/06					<0.30	%	6.9	20		
7048219	Saturation %	2013/08/06			100	80 - 120	<1.0	%	0.9	30		
7049312	D10-ANTHRACENE (sur.)	2013/08/06	107	60 - 130	88	60 - 130	90	%				
7049312	D8-ACENAPHTHYLENE (sur.)	2013/08/06	97	50 - 130	91	50 - 130	91	%				
7049312	D8-NAPHTHALENE (sur.)	2013/08/06	100	50 - 130	92	50 - 130	92	%				
7049312	TERPHENYL-D14 (sur.)	2013/08/06	104	60 - 130	92	60 - 130	94	%				
7049312	Naphthalene	2013/08/07	97	50 - 130	89	50 - 130	<0.010	mg/kg	NC	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7049312	2-Methylnaphthalene	2013/08/07	122	50 - 130	111	50 - 130	<0.020	mg/kg	NC	50		
7049312	Acenaphthylene	2013/08/07	94	50 - 130	90	50 - 130	<0.0050	mg/kg	NC (2)	50		
7049312	Acenaphthene	2013/08/07	97	50 - 130	93	50 - 130	<0.0050	mg/kg	NC (2)	50		
7049312	Fluorene	2013/08/07	96	50 - 130	91	50 - 130	<0.020	mg/kg	NC	50		
7049312	Phenanthrene	2013/08/07	93	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
7049312	Anthracene	2013/08/07	105	60 - 130	89	60 - 130	<0.0040	mg/kg	NC	50		
7049312	Fluoranthene	2013/08/07	101	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7049312	Pyrene	2013/08/07	102	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(a)anthracene	2013/08/07	89	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7049312	Chrysene	2013/08/07	89	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(b&j)fluoranthene	2013/08/07	88	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(k)fluoranthene	2013/08/07	99	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7049312	Benzo(a)pyrene	2013/08/07	101	60 - 130	95	60 - 130	<0.020	mg/kg	NC	50		
7049312	Indeno(1,2,3-cd)pyrene	2013/08/07	106	60 - 130	98	60 - 130	<0.050	mg/kg	NC	50		
7049312	Dibenz(a,h)anthracene	2013/08/07	103	60 - 130	95	60 - 130	<0.050	mg/kg	NC	50		
7049312	Benzo(g,h,i)perylene	2013/08/07	101	60 - 130	96	60 - 130	<0.050	mg/kg	NC	50		
7049312	Benzo(b)fluoranthene	2013/08/07					<0.020	mg/kg	NC	N/A		
7049388	Wet Soluble Sodium (Na)	2013/08/06					<5.0	mg/L	1.6	30		
7049398	Wet Soluble Sodium (Na)	2013/08/06					<5.0	mg/L	0.09	30		
7049403	Wet Soluble Sodium (Na)	2013/08/06					<5.0	mg/L	1.5	30		
7049901	Soluble Chloride (Cl)	2013/08/07					<5.0	mg/L	0.4	30		
7056882	Soluble Chloride (Cl)	2013/08/07					<5.0	mg/L				
7056921	Soluble Chloride (Cl)	2013/08/07					<5.0	mg/L	NC	30		
7058698	D10-ANTHRACENE (sur.)	2013/08/08	95	60 - 130	99	60 - 130	98	%				
7058698	D8-ACENAPHTHYLENE (sur.)	2013/08/08	92	50 - 130	98	50 - 130	92	%				
7058698	D8-NAPHTHALENE (sur.)	2013/08/08	93	50 - 130	97	50 - 130	93	%				
7058698	TERPHENYL-D14 (sur.)	2013/08/08	90	60 - 130	98	60 - 130	96	%				
7058698	Naphthalene	2013/08/08	91	50 - 130	98	50 - 130	<0.010	mg/kg	NC	50		
7058698	2-Methylnaphthalene	2013/08/08	115	50 - 130	125	50 - 130	<0.020	mg/kg	NC	50		
7058698	Acenaphthylene	2013/08/08	93	50 - 130	100	50 - 130	<0.0050	mg/kg	NC	50		
7058698	Acenaphthene	2013/08/08	95	50 - 130	102	50 - 130	<0.0050	mg/kg	19.3	50		
7058698	Fluorene	2013/08/08	95	50 - 130	101	50 - 130	<0.020	mg/kg	NC	50		
7058698	Phenanthrene	2013/08/08	96	60 - 130	97	60 - 130	<0.020	mg/kg	18.5	50		
7058698	Anthracene	2013/08/08	104	60 - 130	106	60 - 130	<0.0040	mg/kg	17.4	50		
7058698	Fluoranthene	2013/08/08	NC	60 - 130	102	60 - 130	<0.020	mg/kg	8.9	50		
7058698	Pyrene	2013/08/08	104	60 - 130	104	60 - 130	<0.020	mg/kg	8.7	50		
7058698	Benzo(a)anthracene	2013/08/08	90	60 - 130	97	60 - 130	<0.020	mg/kg	3.1	50		
7058698	Chrysene	2013/08/08	89	60 - 130	99	60 - 130	<0.020	mg/kg	10.6	50		
7058698	Benzo(b&j)fluoranthene	2013/08/08	74	60 - 130	98	60 - 130	<0.020	mg/kg	1.0	50		

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Sampler Initials: RP

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7058698	Benzo(k)fluoranthene	2013/08/08	112	60 - 130	102	60 - 130	<0.020	mg/kg	26.6	50		
7058698	Benzo(a)pyrene	2013/08/08	100	60 - 130	106	60 - 130	<0.020	mg/kg	5.9	50		
7058698	Indeno(1,2,3-cd)pyrene	2013/08/08	87	60 - 130	99	60 - 130	<0.050	mg/kg	NC	50		
7058698	Dibenz(a,h)anthracene	2013/08/08	88	60 - 130	96	60 - 130	<0.050	mg/kg	NC	50		
7058698	Benzo(g,h,i)perylene	2013/08/08	82	60 - 130	93	60 - 130	<0.050	mg/kg	NC	50		
7058698	Benzo(b)fluoranthene	2013/08/08					<0.020	mg/kg	1.6	N/A		
7058920	D10-ANTHRACENE (sur.)	2013/08/08	92	60 - 130	90	60 - 130	97	%				
7058920	D8-ACENAPHTHYLENE (sur.)	2013/08/08	85	50 - 130	87	50 - 130	97	%				
7058920	D8-NAPHTHALENE (sur.)	2013/08/08	86	50 - 130	88	50 - 130	97	%				
7058920	TERPHENYL-D14 (sur.)	2013/08/08	90	60 - 130	89	60 - 130	99	%				
7058920	Naphthalene	2013/08/08	87	50 - 130	85	50 - 130	<0.010	mg/kg	NC	50		
7058920	2-Methylnaphthalene	2013/08/08	111	50 - 130	106	50 - 130	<0.020	mg/kg	NC	50		
7058920	Acenaphthylene	2013/08/08	87	50 - 130	86	50 - 130	<0.0050	mg/kg	NC	50		
7058920	Acenaphthene	2013/08/08	91	50 - 130	88	50 - 130	<0.0050	mg/kg	NC	50		
7058920	Fluorene	2013/08/08	90	50 - 130	89	50 - 130	<0.020	mg/kg	NC	50		
7058920	Phenanthrene	2013/08/08	87	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
7058920	Anthracene	2013/08/08	99	60 - 130	92	60 - 130	<0.0040	mg/kg	NC	50		
7058920	Fluoranthene	2013/08/08	92	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7058920	Pyrene	2013/08/08	95	60 - 130	90	60 - 130	<0.020	mg/kg	NC	50		
7058920	Benzo(a)anthracene	2013/08/08	85	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
7058920	Chrysene	2013/08/08	87	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7058920	Benzo(b&j)fluoranthene	2013/08/08	88	60 - 130	87	60 - 130	<0.020	mg/kg	NC	50		
7058920	Benzo(k)fluoranthene	2013/08/08	92	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7058920	Benzo(a)pyrene	2013/08/08	96	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7058920	Indeno(1,2,3-cd)pyrene	2013/08/08	86	60 - 130	86	60 - 130	<0.050	mg/kg	NC	50		
7058920	Dibenz(a,h)anthracene	2013/08/08	84	60 - 130	85	60 - 130	<0.050	mg/kg	NC	50		
7058920	Benzo(g,h,i)perylene	2013/08/08	77	60 - 130	81	60 - 130	<0.050	mg/kg	NC	50		
7058920	Benzo(b)fluoranthene	2013/08/08					<0.020	mg/kg	NC	N/A		
7058970	D10-ANTHRACENE (sur.)	2013/08/08	88	60 - 130	85	60 - 130	85	%				
7058970	D8-ACENAPHTHYLENE (sur.)	2013/08/08	91	50 - 130	86	50 - 130	86	%				
7058970	D8-NAPHTHALENE (sur.)	2013/08/08	99	50 - 130	88	50 - 130	89	%				
7058970	TERPHENYL-D14 (sur.)	2013/08/08	95	60 - 130	89	60 - 130	89	%				
7058970	Naphthalene	2013/08/08	94	50 - 130	86	50 - 130	<0.010	mg/kg	2.9	50		
7058970	2-Methylnaphthalene	2013/08/08	112	50 - 130	108	50 - 130	<0.020	mg/kg	NC	50		
7058970	Acenaphthylene	2013/08/08	86	50 - 130	85	50 - 130	<0.0050	mg/kg	NC(2)	50		
7058970	Acenaphthene	2013/08/08	88	50 - 130	87	50 - 130	<0.0050	mg/kg	NC(2)	50		
7058970	Fluorene	2013/08/08	88	50 - 130	87	50 - 130	<0.020	mg/kg	NC(2)	50		
7058970	Phenanthrene	2013/08/08	88	60 - 130	84	60 - 130	<0.020	mg/kg	NC	50		
7058970	Anthracene	2013/08/08	97	60 - 130	90	60 - 130	<0.0040	mg/kg	NC	50		

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7058970	Fluoranthene	2013/08/08	99	60 - 130	89	60 - 130	<0.020	mg/kg	NC	50		
7058970	Pyrene	2013/08/08	102	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7058970	Benzo(a)anthracene	2013/08/08	92	60 - 130	88	60 - 130	<0.020	mg/kg	NC	50		
7058970	Chrysene	2013/08/08	94	60 - 130	91	60 - 130	<0.020	mg/kg	NC	50		
7058970	Benzo(b&j)fluoranthene	2013/08/08	97	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
7058970	Benzo(k)fluoranthene	2013/08/08	90	60 - 130	86	60 - 130	<0.020	mg/kg	NC	50		
7058970	Benzo(a)pyrene	2013/08/08	97	60 - 130	93	60 - 130	<0.020	mg/kg	NC	50		
7058970	Indeno(1,2,3-cd)pyrene	2013/08/08	98	60 - 130	92	60 - 130	<0.050	mg/kg	NC	50		
7058970	Dibenz(a,h)anthracene	2013/08/08	94	60 - 130	88	60 - 130	<0.050	mg/kg	NC	50		
7058970	Benzo(g,h,i)perylene	2013/08/08	93	60 - 130	89	60 - 130	<0.050	mg/kg	NC	50		
7058970	Benzo(b)fluoranthene	2013/08/08					<0.020	mg/kg	NC	N/A		

N/A = Not Applicable
RPD = Relative Percent Difference
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - RDL raised due to sample matrix interference.

Validation Signature Page

Maxxam Job #: B367167

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Andy Lu, Data Validation Coordinator

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (If differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#28621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #: B367167	BOTTLE ORDER #: 404951
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278	CHAIN OF CUSTODY #: C#404951-19-01	PROJECT MANAGER: Crystal Ireland
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	6-40 CADILLAC AVENUE VICTORIA BC V8Z 1T2	Project #:	205.03633.00000		
				Project Name:			
Phone:	(604)775-9349 Fax: (604)775-8645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43		
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:	RP		

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other: _____

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HC0656	SP-98	Aug.1.2013		Soil		X	X					X				2	
2	HC0657	SP-98B	Aug.1.2013				X	X					X				2	
3	HC0658	SP-99	Aug.1.2013				X	X					X				2	
4	HC0659	SP-100	Aug.1.2013				X	X					X				2	
5	HC0660	SP-101	Aug.1.2013				X	X					X				2	
6	HC0661	SP-102	Aug.1.2013				X	X					X				2	
7	HC0662	SP-103	Aug.1.2013				X	X					X				2	
8	HC0663	SP-103B	Aug.1.2013				X	X					X				2	
9	HC0664	SP-104	Aug.1.2013				X	X					X				2	B367167
10	HC0665	SP-105	Aug.1.2013		Soil		X	X					X				2	

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact?
[illegible]	13/08/01	17:50	[illegible] Ami Patel	2013/08/02	07:45		☐	5,5,5	N/A ☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

5,5,6

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free (800) 665 8566 Fax:(604) 632 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #: 404951
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET VANCOUVER BC V6Z 2V8	Address:	6-40 CADILLAC AVENUE VICTORIA BC V8Z 1T2	Project #:	205.03633.00000	CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Project Name:		C#404951-22-01	Crystal Ireland
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Site #:	Colwood 43		
				Sampled By:	RP		

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other

SPECIAL INSTRUCTIONS

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5 working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission): ☐
1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HC0670	SP-106	Aug. 1, 2013		Soil		X	X					X				2	
2	HC0671	SP-107					X	X					X				2	
3	HC0672	SP-108					X	X					X				2	
4	HC0673	SP-109					X	X					X				2	
5	HC0674	SP-110					X	X					X				2	
6	HC0675	SP-110B					X	X					X				2	
7	HC0676	SP-111					X	X					X				2	
8	HC0677	SP-112					X	X					X				2	
9	HC0678	SP-113					X	X					X				2	
10	HC0679	SP-114	Aug. 1, 2013		Soil		X	X					X				2.	B367167

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact?
RUL E. Richard Plourde	13/08/01	17:50	Amit Patel	2013/08/02	07:45		☐	5, 5, 5	☐ Yes ☐ No

MA

5.5.6

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K0 Tel (604) 734 7276 Toll-free (800) 665 8566 Fax (604) 630 0110 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1756 PUBLIC WORKS & GOVERNMENT SERVI	Company Name:	#26621 SLR CONSULTING (CANADA) LTD	Quotation #:	B30720	MAXXAM JOB #:	BOTTLE ORDER #: 404961
Contact Name:	Bradley Klaver	Contact Name:	Aaron Haegele	P.O. #:	700261278		
Address:	641- 800 BURRARD STREET	Address:	8-40 CADILLAC AVENUE	Project #:	205.03633.00000		
	VANCOUVER BC V6Z 2V9		VICTORIA BC V8Z 1T2	Project Name:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
Phone:	(604)775-9349 Fax: (604)775-6645	Phone:	(604)475-9595 Fax: (250)475-9596	Site #:	Colwood 43	C#404961-23-01	Crystal Ireland
Email:	Bradley.Klaver@pwgsc-tpsgc.gc.ca	Email:	ahaegele@slrconsulting.com; ckozley@slrconsulti	Sampled By:	RP		

REGULATORY CRITERIA: ☐ CSR ☒ CCME ☐ BC Water Quality ☐ Other

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED (Please be specific)

TURNAROUND TIME (TAT) REQUIRED

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5 working days for most tests. Please note: Standard TAT for certain tests such as BOD and Cl/Ions/Fluoride are > 5 days - contact your Project Manager for details. ☒

Job Specific Rush TAT (if applies to entire submission): 1 Day ☐ 2 Day ☐ 3 Day ☐ Date Required: ☐

Rush Confirmation Number: (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	CSR/CCME Metals in Soil	PAH in Soil by GC/MS (SIM) - CCME	BCCSR BTEX/VPH by HS in Soil	CCME&CSR BTEX/F1/VPH in Soil	CCME Hydrocarbons (F2-F4 in soil)	LEPH & HEPH for CSR in Soil	Soluble Sodium and Chloride in Soil	TCLP Metals			# of Bottles	Comments
1	HC0686	SP-115	Aug 1 2013		Soil		X	X					X				2	
2	HC0687	SP-116					X	X					X				2	
3	HC0688	SP-117					X	X					X				2	
4	HC0689	SP-118					X	X					X				2	
5	HC0690	SP-118B					X	X					X				2	
6	HC0691	SP-119					X	X					X				2	
7	HC0692	SP-120					X	X					X				2	
8	HC0693	SP-121.	Aug 1, 2013		Soil		X	X					X				2	
9																		B367167
10																		

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact?
G. Richard Ward	13/08/01	17:50	Ami Patel	2013/08/02	07:45		☐	5.5.5	N/A ☐ Yes ☐ No

5.5.6.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

SLR CONSULTING (CANADA) LTD.
ATTN: Becky Macinnis
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Date Received: 13-AUG-12
Report Date: 27-AUG-12 13:49 (MT)
Version: FINAL REV. 2

Client Phone: 250-475-9595

Certificate of Analysis

Lab Work Order #: L1192620

Project P.O. #: NOT SUBMITTED
Job Reference: 205.03575.00000
C of C Numbers:
Legal Site Desc:

Comments: This report contains TCLP PAH data requested on sample SP-9.

Elle Diniz
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-1	L1192620-2	L1192620-3	L1192620-4	L1192620-5
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL
	Sampled Date	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12
	Sampled Time					
	Client ID	SP-1	SP-2	SP-3	SP-4	SP-5
Grouping	**Analyte**					
SOIL						
Physical Tests	Moisture (%)	3.87	4.61	5.90	5.08	4.25
	pH (1:2 soil:water) (pH)	7.18	6.86	6.38	6.86	6.77
Metals	Antimony (Sb) (mg/kg)	0.18	0.14	0.15	0.14	0.12
	Arsenic (As) (mg/kg)	3.77	3.71	3.63	3.25	2.80
	Barium (Ba) (mg/kg)	69.7	56.5	63.2	52.5	43.1
	Beryllium (Be) (mg/kg)	0.33	0.29	0.33	0.29	0.26
	Cadmium (Cd) (mg/kg)	0.068	0.073	0.068	0.079	0.056
	Chromium (Cr) (mg/kg)	29.6	31.5	29.6	25.2	24.2
	Cobalt (Co) (mg/kg)	13.2	13.6	11.2	9.88	9.76
	Copper (Cu) (mg/kg)	63.7	56.0	35.9	30.6	30.9
	Lead (Pb) (mg/kg)	4.55	4.39	3.31	3.79	2.67
	Mercury (Hg) (mg/kg)	0.0295	0.0268	0.0216	0.0195	0.0289
	Molybdenum (Mo) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Nickel (Ni) (mg/kg)	26.4	27.2	23.9	20.5	21.6
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Thallium (Tl) (mg/kg)	<0.050	<0.050	<0.050	<0.050	<0.050
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Uranium (U) (mg/kg)	0.275	0.271	0.293	0.266	0.228
	Vanadium (V) (mg/kg)	91.4	88.3	81.1	72.2	68.6
	Zinc (Zn) (mg/kg)	44.3	46.3	41.4	38.0	38.2
TCLP Extractables	Acenaphthene (mg/L)					
	Acenaphthylene (mg/L)					
	Acridine (mg/L)					
	Anthracene (mg/L)					
	Benz(a)anthracene (mg/L)					
	Benzo(a)pyrene (mg/L)					
	Benzo(b)fluoranthene (mg/L)					
	Benzo(g,h,i)perylene (mg/L)					
	Benzo(k)fluoranthene (mg/L)					
	Chrysene (mg/L)					
	Dibenz(a,h)anthracene (mg/L)					
	Fluoranthene (mg/L)					
	Fluorene (mg/L)					
	Indeno(1,2,3-c,d)pyrene (mg/L)					
	Naphthalene (mg/L)					
	1st Preliminary PH (pH)					

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-6	L1192620-7	L1192620-8	L1192620-9	L1192620-10
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL
	Sampled Date	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12
	Sampled Time					
	Client ID	SP-6	SP-7	SP-8	SP-9	SP-10
Grouping	**Analyte**					
SOIL						
Physical Tests	Moisture (%)	7.13	10.2	8.91	8.85	5.31
	pH (1:2 soil:water) (pH)	6.90	6.62	7.23	6.95	7.01
Metals	Antimony (Sb) (mg/kg)	0.19	0.19	0.15	0.13	0.15
	Arsenic (As) (mg/kg)	3.67	4.44	3.48	2.78	3.15
	Barium (Ba) (mg/kg)	50.6	58.4	58.6	38.5	48.6
	Beryllium (Be) (mg/kg)	0.31	0.31	0.32	0.23	0.28
	Cadmium (Cd) (mg/kg)	0.054	0.051	<0.050	<0.050	0.064
	Chromium (Cr) (mg/kg)	31.4	34.8	33.2	23.9	27.3
	Cobalt (Co) (mg/kg)	10.9	11.9	12.2	8.96	10.6
	Copper (Cu) (mg/kg)	36.5	40.6	41.7	26.9	33.5
	Lead (Pb) (mg/kg)	2.87	3.52	3.18	2.05	3.32
	Mercury (Hg) (mg/kg)	0.0265	0.0327	0.0252	0.0218	0.0241
	Molybdenum (Mo) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Nickel (Ni) (mg/kg)	24.6	25.4	25.2	18.7	22.1
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Thallium (Tl) (mg/kg)	<0.050	<0.050	<0.050	<0.050	<0.050
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Uranium (U) (mg/kg)	0.286	0.310	0.274	0.227	0.254
	Vanadium (V) (mg/kg)	84.3	86.1	82.3	70.9	80.8
	Zinc (Zn) (mg/kg)	39.1	42.5	43.1	31.9	40.6
TCLP Extractables	Acenaphthene (mg/L)				DLA <0.00050	
	Acenaphthylene (mg/L)				DLA <0.00050	
	Acridine (mg/L)				DLA <0.00050	
	Anthracene (mg/L)				DLA <0.00050	
	Benz(a)anthracene (mg/L)				DLA <0.00050	
	Benzo(a)pyrene (mg/L)				DLA <0.00050	
	Benzo(b)fluoranthene (mg/L)				DLA <0.00050	
	Benzo(g,h,i)perylene (mg/L)				DLA <0.00050	
	Benzo(k)fluoranthene (mg/L)				DLA <0.00050	
	Chrysene (mg/L)				DLA <0.00050	
	Dibenz(a,h)anthracene (mg/L)				DLA <0.00050	
	Fluoranthene (mg/L)				DLA <0.00050	
	Fluorene (mg/L)				DLA <0.00050	
	Indeno(1,2,3-c,d)pyrene (mg/L)				DLA <0.00050	
	Naphthalene (mg/L)				DLA <0.00050	
	1st Preliminary PH (pH)				6.83	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-11				
	Description	SED./SOIL				
	Sampled Date	10-AUG-12				
	Sampled Time					
	Client ID	DUP-1				
Grouping	**Analyte**					
SOIL						
Physical Tests	Moisture (%)	9.49				
	pH (1:2 soil:water) (pH)	6.84				
Metals	Antimony (Sb) (mg/kg)	0.17				
	Arsenic (As) (mg/kg)	4.59				
	Barium (Ba) (mg/kg)	63.0				
	Beryllium (Be) (mg/kg)	0.35				
	Cadmium (Cd) (mg/kg)	0.058				
	Chromium (Cr) (mg/kg)	37.4				
	Cobalt (Co) (mg/kg)	11.7				
	Copper (Cu) (mg/kg)	41.8				
	Lead (Pb) (mg/kg)	3.47				
	Mercury (Hg) (mg/kg)	0.0302				
	Molybdenum (Mo) (mg/kg)	<0.50				
	Nickel (Ni) (mg/kg)	27.5				
	Selenium (Se) (mg/kg)	<0.20				
	Silver (Ag) (mg/kg)	<0.10				
	Thallium (Tl) (mg/kg)	<0.050				
	Tin (Sn) (mg/kg)	<2.0				
	Uranium (U) (mg/kg)	0.306				
	Vanadium (V) (mg/kg)	86.9				
	Zinc (Zn) (mg/kg)	43.6				
TCLP Extractables	Acenaphthene (mg/L)					
	Acenaphthylene (mg/L)					
	Acridine (mg/L)					
	Anthracene (mg/L)					
	Benz(a)anthracene (mg/L)					
	Benzo(a)pyrene (mg/L)					
	Benzo(b)fluoranthene (mg/L)					
	Benzo(g,h,i)perylene (mg/L)					
	Benzo(k)fluoranthene (mg/L)					
	Chrysene (mg/L)					
	Dibenz(a,h)anthracene (mg/L)					
	Fluoranthene (mg/L)					
	Fluorene (mg/L)					
	Indeno(1,2,3-c,d)pyrene (mg/L)					
	Naphthalene (mg/L)					
	1st Preliminary PH (pH)					

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-1	L1192620-2	L1192620-3	L1192620-4	L1192620-5
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL
	Sampled Date	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12
	Sampled Time					
	Client ID	SP-1	SP-2	SP-3	SP-4	SP-5
Grouping	**Analyte**					
SOIL						
TCLP Extractables	2nd Preliminary PH (pH)					
	Extraction Solution Initial pH (pH)					
	Final pH (pH)					
	Phenanthrene (mg/L)					
	Pyrene (mg/L)					
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Acenaphthylene (mg/kg)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Anthracene (mg/kg)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Benz(a)anthracene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Benzo(a)pyrene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Benzo(b)fluoranthene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015	<0.015	<0.015	<0.015	<0.015
	Benzo(g,h,i)perylene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Benzo(k)fluoranthene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Chrysene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Dibenz(a,h)anthracene (mg/kg)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Fluoranthene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Fluorene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	2-Methylnaphthalene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Naphthalene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Phenanthrene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Pyrene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Surrogate: Acenaphthene d10 (%)	83.0	75.2	76.3	73.1	75.2
	Surrogate: Chrysene d12 (%)	73.2	65.4	64.7	62.4	64.7
	Surrogate: Naphthalene d8 (%)	83.7	75.2	76.3	72.7	76.1
	Surrogate: Phenanthrene d10 (%)	81.5	73.7	73.8	71.3	73.6
	B(a)P Total Potency Equivalent (mg/kg)	<0.020	<0.020	<0.020	<0.020	<0.020
	IACR (CCME) (mg/kg)	<0.15	<0.15	<0.15	<0.15	<0.15

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-6	L1192620-7	L1192620-8	L1192620-9	L1192620-10
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL
	Sampled Date	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12	10-AUG-12
	Sampled Time					
	Client ID	SP-6	SP-7	SP-8	SP-9	SP-10
Grouping	**Analyte**					
SOIL						
TCLP Extractables	2nd Preliminary PH (pH)				1.13	
	Extraction Solution Initial pH (pH)				4.93	
	Final pH (pH)				5.02	
	Phenanthrene (mg/L)				<0.00050 DLA	
	Pyrene (mg/L)				<0.00050 DLA	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Acenaphthylene (mg/kg)	<0.0050	<0.0050	0.0052	0.0578	0.0050
	Anthracene (mg/kg)	<0.0040	<0.0040	<0.0040	0.0270	<0.0040
	Benz(a)anthracene (mg/kg)	<0.010	<0.010	<0.010	0.163	<0.010
	Benzo(a)pyrene (mg/kg)	<0.010	<0.010	<0.010	0.210	0.010
	Benzo(b)fluoranthene (mg/kg)	<0.010	0.011	0.010	0.255	0.011
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015	<0.015	<0.015	0.364	<0.015
	Benzo(g,h,i)perylene (mg/kg)	<0.010	<0.010	<0.010	0.126	<0.010
	Benzo(k)fluoranthene (mg/kg)	<0.010	<0.010	<0.010	0.109	<0.010
	Chrysene (mg/kg)	<0.010	<0.010	<0.010	0.172	<0.010
	Dibenz(a,h)anthracene (mg/kg)	<0.0050	<0.0050	<0.0050	0.0316	<0.0050
	Fluoranthene (mg/kg)	<0.010	<0.010	<0.010	0.169	<0.010
	Fluorene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010	<0.010	<0.010	0.150	<0.010
	2-Methylnaphthalene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Naphthalene (mg/kg)	<0.010	<0.010	<0.010	<0.010	<0.010
	Phenanthrene (mg/kg)	<0.010	<0.010	0.012	0.024	<0.010
	Pyrene (mg/kg)	<0.010	<0.010	0.026	0.186	<0.010
	Surrogate: Acenaphthene d10 (%)	102.4	97.1	82.4	79.3	86.1
	Surrogate: Chrysene d12 (%)	105.1	95.0	69.4	66.7	61.1
	Surrogate: Naphthalene d8 (%)	102.1	97.3	84.0	73.9	80.9
	Surrogate: Phenanthrene d10 (%)	110.0	98.9	88.9	83.9	75.9
	B(a)P Total Potency Equivalent (mg/kg)	<0.020	<0.020	<0.020	0.312	<0.020
	IACR (CCME) (mg/kg)	<0.15	<0.15	<0.15	3.63	0.16

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1192620-11				
	Description	SED./SOIL				
	Sampled Date	10-AUG-12				
	Sampled Time					
	Client ID	DUP-1				
Grouping	**Analyte**					
SOIL						
TCLP Extractables	2nd Preliminary PH (pH)					
	Extraction Solution Initial pH (pH)					
	Final pH (pH)					
	Phenanthrene (mg/L)					
	Pyrene (mg/L)					
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050				
	Acenaphthylene (mg/kg)	<0.0050				
	Anthracene (mg/kg)	<0.0040				
	Benz(a)anthracene (mg/kg)	<0.010				
	Benzo(a)pyrene (mg/kg)	<0.010				
	Benzo(b)fluoranthene (mg/kg)	<0.010				
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015				
	Benzo(g,h,i)perylene (mg/kg)	<0.010				
	Benzo(k)fluoranthene (mg/kg)	<0.010				
	Chrysene (mg/kg)	<0.010				
	Dibenz(a,h)anthracene (mg/kg)	<0.0050				
	Fluoranthene (mg/kg)	<0.010				
	Fluorene (mg/kg)	<0.010				
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010				
	2-Methylnaphthalene (mg/kg)	<0.010				
	Naphthalene (mg/kg)	<0.010				
	Phenanthrene (mg/kg)	<0.010				
	Pyrene (mg/kg)	<0.010				
	Surrogate: Acenaphthene d10 (%)	89.9				
	Surrogate: Chrysene d12 (%)	82.4				
	Surrogate: Naphthalene d8 (%)	89.0				
	Surrogate: Phenanthrene d10 (%)	92.5				
	B(a)P Total Potency Equivalent (mg/kg)	<0.020				
	IACR (CCME) (mg/kg)	<0.15				

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Acenaphthene	DLA	L1192620-9
Duplicate	Acenaphthylene	DLA	L1192620-9
Duplicate	Acridine	DLA	L1192620-9
Duplicate	Anthracene	DLA	L1192620-9
Duplicate	Benz(a)anthracene	DLA	L1192620-9
Duplicate	Benzo(a)pyrene	DLA	L1192620-9
Duplicate	Benzo(b)fluoranthene	DLA	L1192620-9
Duplicate	Benzo(g,h,i)perylene	DLA	L1192620-9
Duplicate	Benzo(k)fluoranthene	DLA	L1192620-9
Duplicate	Chrysene	DLA	L1192620-9
Duplicate	Dibenz(a,h)anthracene	DLA	L1192620-9
Duplicate	Fluoranthene	DLA	L1192620-9
Duplicate	Fluorene	DLA	L1192620-9
Duplicate	Indeno(1,2,3-c,d)pyrene	DLA	L1192620-9
Duplicate	Naphthalene	DLA	L1192620-9
Duplicate	Phenanthrene	DLA	L1192620-9
Duplicate	Pyrene	DLA	L1192620-9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-200.2-CVAF-VA	Soil	Mercury in Soil by CVAFS	EPA 200.2/245.7

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis is by atomic fluorescence spectrophotometry (EPA Method 245.7).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MET-200.2-CCMS-VA	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020A

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis of the digested extract is by collision cell inductively coupled plasma - mass spectrometry (modifed from EPA Method 6020A).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MOISTURE-VA	Soil	Moisture content	ASTM D2974-00 Method A

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

PAH-TCLP-SF-MS-VA	Soil	PAH's IN TCLP LEACHATE	EPA 3510/8270 LIQ-LIQ GCMS

The sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (acetic acid, water and sodium hydroxide) or extraction fluid #2 (acetic acid and water) depending on the pH of the original sample. The extract is filtered and then extracted with dichloromethane. The extract is solvent exchanged to toluene prior to analysis by capillary column gas chromatography with mass spectrometric detection (GC/MS). Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PAH-TMB-H/A-MS-VA	Soil	PAH - Rotary Extraction (Hexane/Acetone)	EPA 3570/8270

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3545 & 8270, published by the United States Environmental Protection Agency (EPA). The procedure uses a mechanical shaking technique to extract a subsample of the sediment/soil with a 1:1 mixture of hexane and acetone. The extract is then solvent exchanged to toluene. The final extract is analysed by capillary

Reference Information

column gas chromatography with mass spectrometric detection (GC/MS). Surrogate recoveries may not be reported in cases where interferences from the sample matrix prevent accurate quantitation. Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-1:2-VA Soil pH in Soil (1:2 Soil:Water Extraction) BC WLAP METHOD: PH, ELECTROMETRIC, SOIL

This analysis is carried out in accordance with procedures described in the pH, Electrometric in Soil and Sediment method - Section B Physical/Inorganic and Misc. Constituents, BC Environmental Laboratory Manual 2007. The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water. The pH of the solution is then measured using a standard pH probe.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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: L1192620 Report Date: 27-AUG-12

Client: SLR CONSULTING (CANADA) LTD.
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Contact: Becky Macinnis

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-200.2-CVAF-VA	**Soil**							
Batch R2418904								
WG1526976-4 CRM		**VA-CANMET-TILL1**						
Mercury (Hg)			105.5		%		70-130	17-AUG-12
WG1526976-5 CRM		**VA-NRC-PACS2**						
Mercury (Hg)			110.2		%		70-130	17-AUG-12
WG1526976-1 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	17-AUG-12
WG1526976-2 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	17-AUG-12
MET-200.2-CCMS-VA	**Soil**							
Batch R2420012								
WG1526976-4 CRM		**VA-CANMET-TILL1**						
Antimony (Sb)			102.3		%		70-130	17-AUG-12
Arsenic (As)			106.6		%		70-130	17-AUG-12
Barium (Ba)			102.6		%		70-130	17-AUG-12
Beryllium (Be)			0.52		mg/kg		0.34-0.74	17-AUG-12
Cadmium (Cd)			101.1		%		70-130	17-AUG-12
Chromium (Cr)			104.2		%		70-130	17-AUG-12
Cobalt (Co)			102.1		%		70-130	17-AUG-12
Copper (Cu)			96.7		%		70-130	17-AUG-12
Lead (Pb)			93.8		%		70-130	17-AUG-12
Molybdenum (Mo)			0.70		mg/kg		0.24-1.24	17-AUG-12
Nickel (Ni)			102.1		%		70-130	17-AUG-12
Selenium (Se)			0.34		mg/kg		0.12-0.52	17-AUG-12
Silver (Ag)			0.22		mg/kg		0.12-0.32	17-AUG-12
Thallium (Tl)			0.133		mg/kg		0.075-0.175	17-AUG-12
Uranium (U)			113.1		%		70-130	17-AUG-12
Vanadium (V)			106.4		%		70-130	17-AUG-12
Zinc (Zn)			100.1		%		70-130	17-AUG-12
WG1526976-5 CRM		**VA-NRC-PACS2**						
Antimony (Sb)			96.5		%		70-130	17-AUG-12
Arsenic (As)			105.3		%		70-130	17-AUG-12
Barium (Ba)			102.5		%		70-130	17-AUG-12
Beryllium (Be)			0.41		mg/kg		0.21-0.61	17-AUG-12
Cadmium (Cd)			111.9		%		70-130	17-AUG-12
Chromium (Cr)			101.4		%		70-130	17-AUG-12
Cobalt (Co)			96.1		%		70-130	17-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2420012								
WG1526976-5 CRM		**VA-NRC-PACS2**						
Copper (Cu)			96.4		%		70-130	17-AUG-12
Lead (Pb)			98.3		%		70-130	17-AUG-12
Molybdenum (Mo)			105.9		%		70-130	17-AUG-12
Nickel (Ni)			99.8		%		70-130	17-AUG-12
Selenium (Se)			100.8		%		70-130	17-AUG-12
Silver (Ag)			104.1		%		70-130	17-AUG-12
Thallium (Tl)			98.0		%		70-130	17-AUG-12
Tin (Sn)			98.9		%		70-130	17-AUG-12
Uranium (U)			94.7		%		70-130	17-AUG-12
Vanadium (V)			104.0		%		70-130	17-AUG-12
Zinc (Zn)			99.8		%		70-130	17-AUG-12
WG1526976-1 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	17-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	17-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	17-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	17-AUG-12
Cadmium (Cd)			<0.050		mg/kg		0.05	17-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	17-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	17-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	17-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	17-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	17-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	17-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	17-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	17-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	17-AUG-12
Tin (Sn)			<2.0		mg/kg		2	17-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	17-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	17-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	17-AUG-12
WG1526976-2 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	17-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	17-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	17-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	17-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2420012								
WG1526976-2 MB								
Cadmium (Cd)			<0.050		mg/kg		0.05	17-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	17-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	17-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	17-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	17-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	17-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	17-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	17-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	17-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	17-AUG-12
Tin (Sn)			<2.0		mg/kg		2	17-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	17-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	17-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	17-AUG-12
MOISTURE-VA	**Soil**							
Batch R2417239								
WG1526978-3 DUP		**L1192620-1**						
Moisture		3.87	3.96		%	2.2	20	15-AUG-12
WG1526978-2 LCS								
Moisture			100.4		%		90-110	15-AUG-12
WG1526978-1 MB								
Moisture			<0.25		%		0.25	15-AUG-12
PAH-TCLP-SF-MS-VA	**Soil**							
Batch R2422721								
WG1532071-2 DUP		**L1192620-9**						
Naphthalene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Acenaphthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Acenaphthylene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Acridine		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Benz(a)anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Benzo(a)pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Benzo(b)fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Benzo(g,h,i)perylene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Benzo(k)fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TCLP-SF-MS-VA	**Soil**							
Batch R2422721								
WG1532071-2 DUP		**L1192620-9**						
Chrysene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Dibenz(a,h)anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Fluorene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Indeno(1,2,3-c,d)pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Phenanthrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
Pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	25-AUG-12
WG1532071-1 MB								
Naphthalene			<0.000050		mg/L		0.00005	25-AUG-12
Acenaphthene			<0.000050		mg/L		0.00005	25-AUG-12
Acenaphthylene			<0.000050		mg/L		0.00005	25-AUG-12
Acridine			<0.000050		mg/L		0.00005	25-AUG-12
Anthracene			<0.000050		mg/L		0.00005	25-AUG-12
Benz(a)anthracene			<0.000050		mg/L		0.00005	25-AUG-12
Benzo(a)pyrene			<0.000050		mg/L		0.00005	25-AUG-12
Benzo(b)fluoranthene			<0.000050		mg/L		0.00005	25-AUG-12
Benzo(g,h,i)perylene			<0.000050		mg/L		0.00005	25-AUG-12
Benzo(k)fluoranthene			<0.000050		mg/L		0.00005	25-AUG-12
Chrysene			<0.000050		mg/L		0.00005	25-AUG-12
Dibenz(a,h)anthracene			<0.000050		mg/L		0.00005	25-AUG-12
Fluoranthene			<0.000050		mg/L		0.00005	25-AUG-12
Fluorene			<0.000050		mg/L		0.00005	25-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.000050		mg/L		0.00005	25-AUG-12
Phenanthrene			<0.000050		mg/L		0.00005	25-AUG-12
Pyrene			<0.000050		mg/L		0.00005	25-AUG-12
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2417616								
WG1526888-1 MB								
Acenaphthene			<0.0050		mg/kg		0.005	16-AUG-12
Acenaphthylene			<0.0050		mg/kg		0.005	16-AUG-12
Anthracene			<0.0040		mg/kg		0.004	16-AUG-12
Benz(a)anthracene			<0.010		mg/kg		0.01	16-AUG-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	16-AUG-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	16-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2417616								
WG1526888-1 MB								
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	16-AUG-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	16-AUG-12
Chrysene			<0.010		mg/kg		0.01	16-AUG-12
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	16-AUG-12
Fluoranthene			<0.010		mg/kg		0.01	16-AUG-12
Fluorene			<0.010		mg/kg		0.01	16-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.010		mg/kg		0.01	16-AUG-12
2-Methylnaphthalene			<0.010		mg/kg		0.01	16-AUG-12
Naphthalene			<0.010		mg/kg		0.01	16-AUG-12
Phenanthrene			<0.010		mg/kg		0.01	16-AUG-12
Pyrene			<0.010		mg/kg		0.01	16-AUG-12
Surrogate: Naphthalene d8			88.0		%		50-130	16-AUG-12
Surrogate: Acenaphthene d10			86.9		%		60-130	16-AUG-12
Surrogate: Phenanthrene d10			85.6		%		60-130	16-AUG-12
Surrogate: Chrysene d12			75.0		%		60-130	16-AUG-12
Batch R2418313								
WG1527734-1 MB								
Acenaphthene			<0.0050		mg/kg		0.005	17-AUG-12
Acenaphthylene			<0.0050		mg/kg		0.005	17-AUG-12
Anthracene			<0.0040		mg/kg		0.004	17-AUG-12
Benz(a)anthracene			<0.010		mg/kg		0.01	17-AUG-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	17-AUG-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	17-AUG-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	17-AUG-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	17-AUG-12
Chrysene			<0.010		mg/kg		0.01	17-AUG-12
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	17-AUG-12
Fluoranthene			<0.010		mg/kg		0.01	17-AUG-12
Fluorene			<0.010		mg/kg		0.01	17-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.010		mg/kg		0.01	17-AUG-12
2-Methylnaphthalene			<0.010		mg/kg		0.01	17-AUG-12
Naphthalene			<0.010		mg/kg		0.01	17-AUG-12
Phenanthrene			<0.010		mg/kg		0.01	17-AUG-12
Pyrene			<0.010		mg/kg		0.01	17-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2418313								
WG1527734-1 MB								
Surrogate: Naphthalene d8			97.8		%		50-130	17-AUG-12
Surrogate: Acenaphthene d10			98.4		%		60-130	17-AUG-12
Surrogate: Phenanthrene d10			94.8		%		60-130	17-AUG-12
Surrogate: Chrysene d12			83.3		%		60-130	17-AUG-12
Batch R2418323								
WG1526888-4 IRM		**ALS PAH1 RM**						
Acenaphthene			85.9		%		60-130	16-AUG-12
Acenaphthylene			92.1		%		60-130	16-AUG-12
Anthracene			86.3		%		60-130	16-AUG-12
Benz(a)anthracene			91.6		%		60-130	16-AUG-12
Benzo(a)pyrene			92.7		%		60-130	16-AUG-12
Benzo(b)fluoranthene			103.1		%		60-130	16-AUG-12
Benzo(g,h,i)perylene			77.8		%		60-130	16-AUG-12
Benzo(k)fluoranthene			91.0		%		60-130	16-AUG-12
Chrysene			86.3		%		60-130	16-AUG-12
Dibenz(a,h)anthracene			96.4		%		60-130	16-AUG-12
Fluoranthene			94.5		%		60-130	16-AUG-12
Fluorene			78.6		%		60-130	16-AUG-12
Indeno(1,2,3-c,d)pyrene			83.1		%		60-130	16-AUG-12
2-Methylnaphthalene			93.1		%		60-130	16-AUG-12
Naphthalene			93.1		%		50-130	16-AUG-12
Phenanthrene			92.3		%		60-130	16-AUG-12
Pyrene			94.3		%		60-130	16-AUG-12
Batch R2418470								
WG1527734-4 IRM		**ALS PAH1 RM**						
Acenaphthene			99.1		%		60-130	17-AUG-12
Acenaphthylene			119.9		%		60-130	17-AUG-12
Anthracene			106.9		%		60-130	17-AUG-12
Benz(a)anthracene			94.2		%		60-130	17-AUG-12
Benzo(a)pyrene			116.3		%		60-130	17-AUG-12
Benzo(b)fluoranthene			113.6		%		60-130	17-AUG-12
Benzo(g,h,i)perylene			121.2		%		60-130	17-AUG-12
Benzo(k)fluoranthene			113.2		%		60-130	17-AUG-12
Chrysene			117.2		%		60-130	17-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2418470								
WG1527734-4 IRM		**ALS PAH1 RM**						
Dibenz(a,h)anthracene			123.4		%		60-130	17-AUG-12
Fluoranthene			118.7		%		60-130	17-AUG-12
Fluorene			92.8		%		60-130	17-AUG-12
Indeno(1,2,3-c,d)pyrene			127.2		%		60-130	17-AUG-12
2-Methylnaphthalene			95.9		%		60-130	17-AUG-12
Naphthalene			112.2		%		50-130	17-AUG-12
Phenanthrene			122.3		%		60-130	17-AUG-12
Pyrene			119.2		%		60-130	17-AUG-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.

L1192620

ALS Environmental
excellence in analytical testing

1988 Triumph Street, Vancouver, BC Canada V5L 1K5
Tel: 604-253-4188 Fax: 604-253-6700

2G 5N6
: 403-214-5430

www.alsenviro.com

CHAIN OF CUSTODY / AN

L1192620-COFC

PAGE 1 OF 1

SEND REPORT TO:

COMPANY:	SLR Consulting				
ADDRESS:	6-40 Cadillac Ave.				
CITY:	Victoria	PROV: BC	POSTAL CODE:	V8Z 1T2	
CONTACT:	Becky MacInnis		TELEPHONE:	1-250-475-9595	
PROJECT NAME/#:	205.03575.00000		SAMPLER:	Martin Birse	
ALSE QUOTE #:	PWGSC pricing		ALSE CONTACT:	Elle Diniz	

REPORT FORMAT:
- ○ Hardcopy ○ Fax #:
- ◉ E-mail Specify file type:
- E-mail Address: jnyman@slrconsulting.com

INVOICE FORMAT:
- ◉ Hardcopy ○ Fax #:
- ○ E-mail (pdf format)
- E-mail Address:

- ◉ Routine Turn Around
- ○ Rush (Surcharges May Apply) Specify Due Date: Time:

(Please fill in if different from Report To at left) Require copy of Report? ☐ Yes ☑ No

COMPANY:			CONTACT:		
ADDRESS:			P.O. #:		
CITY:		PROV:	POSTAL CODE:		TEL:

ANALYSIS REQUESTED:

FOR LAB USE ONLY

	SAMPLE IDENTIFICATION	DATE / TIME COLLECTED YY-MM-DD	Time	MATRIX	CCME Metals	PAH	HOLD	NOTES (sample specific comments, due dates, etc.)
	SP-1	12-08-10		sed./soil	X	X		
	SP-2	12-08-10		sed./soil	X	X		
	SP-3	12-08-10		sed./soil	X	X		
	SP-4	12-08-10		sed./soil	X	X		
	SP-5	12-08-10		sed./soil	X	X		
	SP-6	12-08-10		sed./soil	X	X		
	SP-7	12-08-10		sed./soil	X	X		
	SP-8	12-08-10		sed./soil	X	X		
	SP-9	12-08-10		sed./soil	X	X		
	SP-10	12-08-10		sed./soil	X	X		
	DUP-1	12-08-10		sed./soil	X	X		

RELINQUISHED BY:				RECEIVED BY:			
NAME:	Martin Birse	DATE:	10-Aug-12	NAME:		DATE:	
OF:	SLR Consulting	TIME:	4:00 PM	OF:		TIME:	
NAME:		DATE:		NAME:	Brit	DATE:	Aug. 13
OF:		TIME:		OF:	ALS Environmental	TIME:	9:00

Special Instructions / Comments (billing details, QC reporting, etc.): Please send to mdbirse@slrconsulting.com as well

FOR LAB USE ONLY Cooler Seal Intact? Yes X No___ N/A___ Sample Temperature: 16.3°C Frozen? Yes___ No X Cooling Method? Icepacks X Ice___ None___

SLR CONSULTING (CANADA) LTD.
ATTN: Becky Macinnis
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Date Received: 18-AUG-12
Report Date: 05-SEP-12 12:43 (MT)
Version: FINAL REV. 2

Client Phone: 250-475-9595

Certificate of Analysis

Lab Work Order #: L1196150

Project P.O. #: VIC1088
Job Reference: 205.03575.00000
C of C Numbers:
Legal Site Desc:

Comments: This report contains additional TCLP PAH data requested on sample SP-14.

Elle Diniz
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1196150-1	L1196150-2	L1196150-3	L1196150-4	
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	
	Sampled Date	17-AUG-12	17-AUG-12	17-AUG-12	17-AUG-12	
	Sampled Time					
	Client ID	SP-11	SP-12	SP-13	SP-14	
Grouping	**Analyte**					
SOIL						
Physical Tests	Moisture (%)	4.28	5.72	6.71	6.55	
	pH (1:2 soil:water) (pH)	7.20	7.31	6.61	7.20	
Metals	Antimony (Sb) (mg/kg)	0.12	0.12	0.15	0.14	
	Arsenic (As) (mg/kg)	3.26	3.24	4.49	3.30	
	Barium (Ba) (mg/kg)	60.4	60.9	69.3	56.1	
	Beryllium (Be) (mg/kg)	0.27	0.26	0.33	0.26	
	Cadmium (Cd) (mg/kg)	0.058	0.058	0.074	0.056	
	Chromium (Cr) (mg/kg)	33.9	25.1	30.1	31.5	
	Cobalt (Co) (mg/kg)	11.5	11.0	13.5	12.8	
	Copper (Cu) (mg/kg)	43.8	34.2	44.1	47.0	
	Lead (Pb) (mg/kg)	4.98	3.01	4.15	3.35	
	Mercury (Hg) (mg/kg)	0.0246	0.0186	0.0242	0.0187	
	Molybdenum (Mo) (mg/kg)	1.53	<0.50	<0.50	0.67	
	Nickel (Ni) (mg/kg)	22.5	22.6	26.0	25.1	
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	
	Thallium (Tl) (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	
	Uranium (U) (mg/kg)	0.233	0.225	0.281	0.256	
	Vanadium (V) (mg/kg)	69.1	69.8	75.4	77.2	
	Zinc (Zn) (mg/kg)	45.3	41.1	51.2	43.4	
TCLP Extractables	Acenaphthene (mg/L)				<0.00050	
	Acenaphthylene (mg/L)				<0.00050	
	Acridine (mg/L)				<0.00050	
	Anthracene (mg/L)				<0.00050	
	Benz(a)anthracene (mg/L)				<0.00050	
	Benzo(a)pyrene (mg/L)				<0.00050	
	Benzo(b)fluoranthene (mg/L)				<0.00050	
	Benzo(g,h,i)perylene (mg/L)				<0.00050	
	Benzo(k)fluoranthene (mg/L)				<0.00050	
	Chrysene (mg/L)				<0.00050	
	Dibenz(a,h)anthracene (mg/L)				<0.00050	
	Fluoranthene (mg/L)				<0.00050	
	Fluorene (mg/L)				<0.00050	
	Indeno(1,2,3-c,d)pyrene (mg/L)				<0.00050	
	Naphthalene (mg/L)				<0.00050	
	1st Preliminary PH (pH)				7.85	

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1196150-1	L1196150-2	L1196150-3	L1196150-4	
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	
	Sampled Date	17-AUG-12	17-AUG-12	17-AUG-12	17-AUG-12	
	Sampled Time					
	Client ID	SP-11	SP-12	SP-13	SP-14	
Grouping	**Analyte**					
SOIL						
TCLP Extractables	2nd Preliminary PH (pH)				1.12	
	Extraction Solution Initial pH (pH)				4.94	
	Final pH (pH)				4.98	
	Phenanthrene (mg/L)				<0.00050	
	Pyrene (mg/L)				<0.00050	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Acenaphthylene (mg/kg)	0.217	0.098	0.055	0.344	
	Anthracene (mg/kg)	0.074	<0.050	<0.050	0.132	
	Benz(a)anthracene (mg/kg)	0.360	0.130	0.105	0.706	
	Benzo(a)pyrene (mg/kg)	0.473	0.219	0.118	0.810	
	Benzo(b)fluoranthene (mg/kg)	0.560	0.260	0.142	1.05	
	Benzo(g,h,i)perylene (mg/kg)	0.327	0.142	0.063	0.497	
	Benzo(k)fluoranthene (mg/kg)	0.237	0.122	0.080	0.406	
	Chrysene (mg/kg)	0.312	0.132	0.101	0.678	
	Dibenz(a,h)anthracene (mg/kg)	0.091	<0.050	<0.050	0.143	
	Fluoranthene (mg/kg)	0.335	0.129	0.120	0.687	
	Fluorene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	0.400	0.150	0.070	0.658	
	2-Methylnaphthalene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Naphthalene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Phenanthrene (mg/kg)	0.057	<0.050	0.051	0.173	
	Pyrene (mg/kg)	0.406	0.169	0.120	0.723	
	Surrogate: Acenaphthene d10 (%)	82.6	74.1	84.1	81.6	
	Surrogate: Chrysene d12 (%)	102.2	86.2	93.6	99.6	
	Surrogate: Naphthalene d8 (%)	78.0	73.0	86.8	77.9	
	Surrogate: Phenanthrene d10 (%)	89.1	89.9	100.0	86.6	

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-200.2-CVAF-VA	Soil	Mercury in Soil by CVAFS	EPA 200.2/245.7

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis is by atomic fluorescence spectrophotometry (EPA Method 245.7).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MET-200.2-CCMS-VA	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020A

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis of the digested extract is by collision cell inductively coupled plasma - mass spectrometry (modifed from EPA Method 6020A).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MOISTURE-VA	Soil	Moisture content	ASTM D2974-00 Method A

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

PAH-TCLP-SF-MS-VA	Soil	PAH's IN TCLP LEACHATE	EPA 3510/8270 LIQ-LIQ GCMS

The sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (acetic acid, water and sodium hydroxide) or extraction fluid #2 (acetic acid and water) depending on the pH of the original sample. The extract is filtered and then extracted with dichloromethane. The extract is solvent exchanged to toluene prior to analysis by capillary column gas chromatography with mass spectrometric detection (GC/MS). Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PAH-TMB-H/A-MS-VA	Soil	PAH - Rotary Extraction (Hexane/Acetone)	EPA 3570/8270

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3545 & 8270, published by the United States Environmental Protection Agency (EPA). The procedure uses a mechanical shaking technique to extract a subsample of the sediment/soil with a 1:1 mixture of hexane and acetone. The extract is then solvent exchanged to toluene. The final extract is analysed by capillary column gas chromatography with mass spectrometric detection (GC/MS). Surrogate recoveries may not be reported in cases where interferences from the sample matrix prevent accurate quantitation. Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-1:2-VA	Soil	pH in Soil (1:2 Soil:Water Extraction)	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL

This analysis is carried out in accordance with procedures described in the pH, Electrometric in Soil and Sediment method - Section B Physical/Inorganic and Misc. Constituents, BC Environmental Laboratory Manual 2007. The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water. The pH of the solution is then measured using a standard pH probe.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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: L1196150 Report Date: 05-SEP-12

Client: SLR CONSULTING (CANADA) LTD.
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Contact: Becky Macinnis

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-200.2-CVAF-VA	**Soil**							
Batch R2421714								
WG1530506-4 CRM		**VA-CANMET-TILL1**						
Mercury (Hg)			94.3		%		70-130	22-AUG-12
WG1530506-5 CRM		**VA-NRC-PACS2**						
Mercury (Hg)			103.9		%		70-130	22-AUG-12
WG1530506-1 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	22-AUG-12
WG1530506-2 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	22-AUG-12
MET-200.2-CCMS-VA	**Soil**							
Batch R2422553								
WG1530506-4 CRM		**VA-CANMET-TILL1**						
Antimony (Sb)			99.1		%		70-130	22-AUG-12
Arsenic (As)			102.4		%		70-130	22-AUG-12
Barium (Ba)			94.9		%		70-130	22-AUG-12
Beryllium (Be)			0.49		mg/kg		0.34-0.74	22-AUG-12
Cadmium (Cd)			86.4		%		70-130	22-AUG-12
Chromium (Cr)			98.4		%		70-130	22-AUG-12
Cobalt (Co)			95.2		%		70-130	22-AUG-12
Copper (Cu)			92.7		%		70-130	22-AUG-12
Lead (Pb)			90.6		%		70-130	22-AUG-12
Molybdenum (Mo)			0.68		mg/kg		0.24-1.24	22-AUG-12
Nickel (Ni)			98.1		%		70-130	22-AUG-12
Selenium (Se)			0.30		mg/kg		0.12-0.52	22-AUG-12
Silver (Ag)			0.21		mg/kg		0.12-0.32	22-AUG-12
Thallium (Tl)			0.120		mg/kg		0.075-0.175	22-AUG-12
Uranium (U)			105.3		%		70-130	22-AUG-12
Vanadium (V)			99.5		%		70-130	22-AUG-12
Zinc (Zn)			93.0		%		70-130	22-AUG-12
WG1530506-5 CRM		**VA-NRC-PACS2**						
Antimony (Sb)			95.6		%		70-130	22-AUG-12
Arsenic (As)			104.9		%		70-130	22-AUG-12
Barium (Ba)			116.5		%		70-130	22-AUG-12
Beryllium (Be)			0.36		mg/kg		0.21-0.61	22-AUG-12
Cadmium (Cd)			104.2		%		70-130	22-AUG-12
Chromium (Cr)			102.1		%		70-130	22-AUG-12
Cobalt (Co)			96.7		%		70-130	22-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2422553								
WG1530506-5 CRM		**VA-NRC-PACS2**						
Copper (Cu)			96.4		%		70-130	22-AUG-12
Lead (Pb)			99.3		%		70-130	22-AUG-12
Molybdenum (Mo)			106.7		%		70-130	22-AUG-12
Nickel (Ni)			98.6		%		70-130	22-AUG-12
Selenium (Se)			99.4		%		70-130	22-AUG-12
Silver (Ag)			101.8		%		70-130	22-AUG-12
Thallium (Tl)			98.3		%		70-130	22-AUG-12
Tin (Sn)			103.1		%		70-130	22-AUG-12
Uranium (U)			92.6		%		70-130	22-AUG-12
Vanadium (V)			104.3		%		70-130	22-AUG-12
Zinc (Zn)			99.9		%		70-130	22-AUG-12
WG1530506-1 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	22-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	22-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	22-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	22-AUG-12
Cadmium (Cd)			<0.050		mg/kg		0.05	22-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	22-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	22-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	22-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	22-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	22-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	22-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	22-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	22-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	22-AUG-12
Tin (Sn)			<2.0		mg/kg		2	22-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	22-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	22-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	22-AUG-12
WG1530506-2 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	22-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	22-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	22-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	22-AUG-12

Quality Control Report

Workorder: L1196150 Report Date: 05-SEP-12

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2422553								
WG1530506-2 MB								
Cadmium (Cd)			<0.050		mg/kg		0.05	22-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	22-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	22-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	22-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	22-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	22-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	22-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	22-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	22-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	22-AUG-12
Tin (Sn)			<2.0		mg/kg		2	22-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	22-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	22-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	22-AUG-12
MOISTURE-VA	**Soil**							
Batch R2420689								
WG1530496-2 LCS								
Moisture			100.4		%		90-110	21-AUG-12
WG1530496-1 MB								
Moisture			<0.25		%		0.25	21-AUG-12
PAH-TCLP-SF-MS-VA	**Soil**							
Batch R2428335								
WG1536708-2 DUP		**L1196150-4**						
Naphthalene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Acenaphthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Acenaphthylene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Acridine		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Benz(a)anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Benzo(a)pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Benzo(b)fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Benzo(g,h,i)perylene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Benzo(k)fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Chrysene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Dibenz(a,h)anthracene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12

Quality Control Report

Workorder: L1196150 Report Date: 05-SEP-12

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TCLP-SF-MS-VA	**Soil**							
Batch R2428335								
WG1536708-2 DUP		**L1196150-4**						
Fluoranthene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Fluorene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Indeno(1,2,3-c,d)pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Phenanthrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
Pyrene		<0.00050	<0.00050	RPD-NA	mg/L	N/A	50	01-SEP-12
WG1536708-1 MB								
Naphthalene			<0.000050		mg/L		0.00005	01-SEP-12
Acenaphthene			<0.000050		mg/L		0.00005	01-SEP-12
Acenaphthylene			<0.000050		mg/L		0.00005	01-SEP-12
Acridine			<0.000050		mg/L		0.00005	01-SEP-12
Anthracene			<0.000050		mg/L		0.00005	01-SEP-12
Benz(a)anthracene			<0.000050		mg/L		0.00005	01-SEP-12
Benzo(a)pyrene			<0.000050		mg/L		0.00005	01-SEP-12
Benzo(b)fluoranthene			<0.000050		mg/L		0.00005	01-SEP-12
Benzo(g,h,i)perylene			<0.000050		mg/L		0.00005	01-SEP-12
Benzo(k)fluoranthene			<0.000050		mg/L		0.00005	01-SEP-12
Chrysene			<0.000050		mg/L		0.00005	01-SEP-12
Dibenz(a,h)anthracene			<0.000050		mg/L		0.00005	01-SEP-12
Fluoranthene			<0.000050		mg/L		0.00005	01-SEP-12
Fluorene			<0.000050		mg/L		0.00005	01-SEP-12
Indeno(1,2,3-c,d)pyrene			<0.000050		mg/L		0.00005	01-SEP-12
Phenanthrene			<0.000050		mg/L		0.00005	01-SEP-12
Pyrene			<0.000050		mg/L		0.00005	01-SEP-12
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2420555								
WG1530510-4 IRM		**ALS PAH1 RM**						
Acenaphthene			77.8		%		60-130	22-AUG-12
Acenaphthylene			90.2		%		60-130	22-AUG-12
Anthracene			78.7		%		60-130	22-AUG-12
Benz(a)anthracene			106.7		%		60-130	22-AUG-12
Benzo(a)pyrene			91.2		%		60-130	22-AUG-12
Benzo(b)fluoranthene			91.2		%		60-130	22-AUG-12
Benzo(g,h,i)perylene			84.2		%		60-130	22-AUG-12
Benzo(k)fluoranthene			98.8		%		60-130	22-AUG-12

Quality Control Report

Workorder: L1196150 Report Date: 05-SEP-12

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2420555								
WG1530510-4 IRM		**ALS PAH1 RM**						
Chrysene			100.5		%		60-130	22-AUG-12
Dibenz(a,h)anthracene			77.6		%		60-130	22-AUG-12
Fluoranthene			93.0		%		60-130	22-AUG-12
Fluorene			67.2		%		60-130	22-AUG-12
Indeno(1,2,3-c,d)pyrene			84.8		%		60-130	22-AUG-12
2-Methylnaphthalene			68.6		%		60-130	22-AUG-12
Naphthalene			74.4		%		50-130	22-AUG-12
Phenanthrene			82.2		%		60-130	22-AUG-12
Pyrene			93.4		%		60-130	22-AUG-12
WG1530510-1 MB								
Acenaphthene			<0.0050		mg/kg		0.005	22-AUG-12
Acenaphthylene			<0.0050		mg/kg		0.005	22-AUG-12
Anthracene			<0.0040		mg/kg		0.004	22-AUG-12
Benz(a)anthracene			<0.010		mg/kg		0.01	22-AUG-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	22-AUG-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	22-AUG-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	22-AUG-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	22-AUG-12
Chrysene			<0.010		mg/kg		0.01	22-AUG-12
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	22-AUG-12
Fluoranthene			<0.010		mg/kg		0.01	22-AUG-12
Fluorene			<0.010		mg/kg		0.01	22-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.010		mg/kg		0.01	22-AUG-12
2-Methylnaphthalene			<0.010		mg/kg		0.01	22-AUG-12
Naphthalene			<0.010		mg/kg		0.01	22-AUG-12
Phenanthrene			<0.010		mg/kg		0.01	22-AUG-12
Pyrene			<0.010		mg/kg		0.01	22-AUG-12
Surrogate: Naphthalene d8			79.7		%		50-130	22-AUG-12
Surrogate: Acenaphthene d10			90.5		%		60-130	22-AUG-12
Surrogate: Phenanthrene d10			100.4		%		60-130	22-AUG-12
Surrogate: Chrysene d12			113.8		%		60-130	22-AUG-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.

L1196150

ALS Environmental
excellence in analytical testing

1988 Triumph Street, **Vancouver**, BC Canada V5L 1K5
Tel: 604-253-4188 Toll Free: 1-800-665-0243 Fax: 604-253-6700

#2 -21 Highfield Circle SE, **Calgary**, AB Canada T2G 5N6
Tel: 403-214-5431 Toll Free: 1-866-722-6231 Fax: 403-214-5430

www.alsenviro.com

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM

SEND REPORT TO:

COMPANY:	SLR Consulting
ADDRESS:	6-40 Cadillac Ave.
CITY:	Victoria PROV: BC POSTAL CODE: V8Z 1T2
CONTACT:	Becky MacInnis TELEPHONE: 1-250-475-9595
PROJECT NAME/#:	205.03575.00000 SAMPLER: Martin Birse
ALSE QUOTE #:	PWGSC pricing ALSE CONTACT: Elle Diniz

REPORT FORMAT:
- ○ Hardcopy ○ Fax #:
- ◉ E-mail Specify file type:
- E-mail Address: jnyman@slrconsulting.com

INVOICE FORMAT:
- ◉ Hardcopy ○ Fax #:
- ○ E-mail (pdf format)
- E-mail Address:

- ◉ Routine Turn Around
- ○ Rush (Surcharges May Apply) Specify Due Date: Time:

SEND INVOICE TO: (complete if different from Report To at left) Require copy of Report? ☐ Yes ☑ No

COMPANY:		CONTACT:	
ADDRESS:		P.O. #:	
CITY:	PROV:	POSTAL CODE:	TEL:

ANALYSIS REQUESTED:

FOR LAB USE ONLY

	SAMPLE IDENTIFICATION	DATE / TIME COLLECTED YY-MM-DD	Time	MATRIX	CCME Metals	PAH	HOLD	NOTES (sample specific comments, due dates, etc.)
	SP-11	12-08-17		sed./soil	X	X		
	SP-12	12-08-17		sed./soil	X	X		
	SP-13	12-08-17		sed./soil	X	X		
	SP-14	12-08-17		sed./soil	X	X		

L1196150-COFC

RELINQUISHED BY:

NAME:	Martin Birse	DATE:	17-Aug-12
OF:	SLR Consulting	TIME:	4:00 PM
NAME:		DATE:	
OF:		TIME:	

RECEIVED BY: Tina

NAME:		DATE:	Aug 18
OF:		TIME:	11:05
NAME:		DATE:	
OF:	ALS Environmental	TIME:	

Special Instructions / Comments (billing details, QC reporting, etc.): Please send to mdbirse@slrconsulting.com as well

FOR LAB USE ONLY Cooler Seal Intact? Yes___ No___ N/A___ Sample Temperature: 21 °C Frozen? Yes___ No___ Cooling Method? Icepacks___ Ice___ None___

SLR CONSULTING (CANADA) LTD.
ATTN: Becky Macinnis
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Date Received: 25-AUG-12
Report Date: 04-SEP-12 16:10 (MT)
Version: FINAL

Client Phone: 250-475-9595

Certificate of Analysis

Lab Work Order #: L1199893

Project P.O. #: VIC1088
Job Reference: 205.03575.00000
C of C Numbers:
Legal Site Desc:

Elle Diniz
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1199893-1	L1199893-2	L1199893-3	L1199893-4	
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	
	Sampled Date	24-AUG-12	24-AUG-12	24-AUG-12	24-AUG-12	
	Sampled Time					
	Client ID	SP-15	SP-16	SP-17	DUP-2	
Grouping	**Analyte**					
SOIL						
Physical Tests	Moisture (%)	4.57	3.91	4.02	3.80	
	pH (1:2 soil:water) (pH)	7.55	7.55	7.62	7.68	
Metals	Antimony (Sb) (mg/kg)	0.12	0.15	0.17	0.13	
	Arsenic (As) (mg/kg)	3.02	3.34	2.90	3.10	
	Barium (Ba) (mg/kg)	55.3	44.9	48.2	50.6	
	Beryllium (Be) (mg/kg)	0.27	0.26	0.27	0.27	
	Cadmium (Cd) (mg/kg)	0.052	0.061	0.056	0.063	
	Chromium (Cr) (mg/kg)	30.8	29.1	28.9	36.9	
	Cobalt (Co) (mg/kg)	14.2	12.2	12.1	14.0	
	Copper (Cu) (mg/kg)	56.2	42.9	42.5	45.6	
	Lead (Pb) (mg/kg)	3.47	4.55	5.82	4.92	
	Mercury (Hg) (mg/kg)	0.0282	0.0197	0.0233	0.0243	
	Molybdenum (Mo) (mg/kg)	<0.50	<0.50	<0.50	<0.50	
	Nickel (Ni) (mg/kg)	27.6	23.8	24.4	27.2	
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	
	Thallium (Tl) (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	
	Uranium (U) (mg/kg)	0.243	0.242	0.254	0.255	
	Vanadium (V) (mg/kg)	79.0	69.8	73.0	78.0	
	Zinc (Zn) (mg/kg)	44.5	43.4	40.1	48.7	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Acenaphthylene (mg/kg)	0.105	0.232	0.128	0.207	
	Anthracene (mg/kg)	0.061	0.209	0.073	0.189	
	Benz(a)anthracene (mg/kg)	0.263	0.764	0.301	0.638	
	Benzo(a)pyrene (mg/kg)	0.311	0.775	0.383	0.659	
	Benzo(b)fluoranthene (mg/kg)	0.389	1.02	0.482	0.883	
	Benzo(g,h,i)perylene (mg/kg)	0.176	0.426	0.192	0.318	
	Benzo(k)fluoranthene (mg/kg)	0.168	0.446	0.213	0.406	
	Chrysene (mg/kg)	0.269	0.736	0.318	0.610	
	Dibenz(a,h)anthracene (mg/kg)	<0.050	0.118	0.053	0.099	
	Fluoranthene (mg/kg)	0.331	1.46	0.426	1.18	
	Fluorene (mg/kg)	<0.050	0.059	<0.050	<0.050	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	0.216	0.567	0.242	0.453	
	2-Methylnaphthalene (mg/kg)	<0.050	<0.050	<0.050	<0.050	
	Naphthalene (mg/kg)	<0.050	<0.050	<0.050	<0.050	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1199893-1	L1199893-2	L1199893-3	L1199893-4	
	Description	SED./SOIL	SED./SOIL	SED./SOIL	SED./SOIL	
	Sampled Date	24-AUG-12	24-AUG-12	24-AUG-12	24-AUG-12	
	Sampled Time					
	Client ID	SP-15	SP-16	SP-17	DUP-2	
Grouping	**Analyte**					
SOIL						
Polycyclic Aromatic Hydrocarbons	Phenanthrene (mg/kg)	0.131	0.653	0.172	0.604	
	Pyrene (mg/kg)	0.339	1.41	0.449	1.15	
	Surrogate: Acenaphthene d10 (%)	90.6	89.7	91.8	79.1	
	Surrogate: Chrysene d12 (%)	111.2	94.8	98.9	80.6	
	Surrogate: Naphthalene d8 (%)	82.6	91.3	89.3	81.1	
	Surrogate: Phenanthrene d10 (%)	105.5	90.3	91.2	78.0	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Cobalt (Co)	DUP-H	L1199893-1, -2, -3, -4

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-200.2-CVAF-VA	Soil	Mercury in Soil by CVAFS	EPA 200.2/245.7

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis is by atomic fluorescence spectrophotometry (EPA Method 245.7).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MET-200.2-CCMS-VA	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020A

This analysis is carried out using procedures from CSR Analytical Method: "Strong Acid Leachable Metals (SALM) in Soil", BC Ministry of Environment, 26 June 2009, and procedures adapted from EPA Method 200.2. The sample is manually homogenized, dried at 60 degrees Celsius, sieved through a 2 mm (10 mesh) sieve (this sieve step is omitted for international soil samples), and a representative subsample of the dry material is weighed. The sample is then digested at 95 degrees Celsius for 2 hours by block digester using concentrated nitric and hydrochloric acids. Instrumental analysis of the digested extract is by collision cell inductively coupled plasma - mass spectrometry (modifed from EPA Method 6020A).

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 may be environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

MOISTURE-VA	Soil	Moisture content	ASTM D2974-00 Method A

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

PAH-TMB-H/A-MS-VA	Soil	PAH - Rotary Extraction (Hexane/Acetone)	EPA 3570/8270

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3545 & 8270, published by the United States Environmental Protection Agency (EPA). The procedure uses a mechanical shaking technique to extract a subsample of the sediment/soil with a 1:1 mixture of hexane and acetone. The extract is then solvent exchanged to toluene. The final extract is analysed by capillary column gas chromatography with mass spectrometric detection (GC/MS). Surrogate recoveries may not be reported in cases where interferences from the sample matrix prevent accurate quantitation. Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-1:2-VA	Soil	pH in Soil (1:2 Soil:Water Extraction)	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL

This analysis is carried out in accordance with procedures described in the pH, Electrometric in Soil and Sediment method - Section B Physical/Inorganic and Misc. Constituents, BC Environmental Laboratory Manual 2007. The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water. The pH of the solution is then measured using a standard pH probe.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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: L1199893 Report Date: 04-SEP-12

Client: SLR CONSULTING (CANADA) LTD.
6 - 40 Cadillac Avenue
Victoria BC V8Z 1T2

Contact: Becky Macinnis

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-200.2-CVAF-VA	**Soil**							
Batch R2427005								
WG1535134-5 CRM		**VA-CANMET-TILL1**						
Mercury (Hg)			93.2		%		70-130	30-AUG-12
WG1535134-6 CRM		**VA-NRC-PACS2**						
Mercury (Hg)			109.6		%		70-130	30-AUG-12
WG1535134-1 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	30-AUG-12
WG1535134-2 MB								
Mercury (Hg)			<0.0050		mg/kg		0.005	30-AUG-12
MET-200.2-CCMS-VA	**Soil**							
Batch R2427753								
WG1535134-5 CRM		**VA-CANMET-TILL1**						
Antimony (Sb)			102.8		%		70-130	30-AUG-12
Arsenic (As)			106.7		%		70-130	30-AUG-12
Barium (Ba)			103.9		%		70-130	30-AUG-12
Beryllium (Be)			0.51		mg/kg		0.34-0.74	30-AUG-12
Cadmium (Cd)			92.0		%		70-130	30-AUG-12
Chromium (Cr)			106.7		%		70-130	30-AUG-12
Cobalt (Co)			102.6		%		70-130	30-AUG-12
Copper (Cu)			97.7		%		70-130	30-AUG-12
Lead (Pb)			95.5		%		70-130	30-AUG-12
Molybdenum (Mo)			0.73		mg/kg		0.24-1.24	30-AUG-12
Nickel (Ni)			105.8		%		70-130	30-AUG-12
Selenium (Se)			0.33		mg/kg		0.12-0.52	30-AUG-12
Silver (Ag)			0.24		mg/kg		0.12-0.32	30-AUG-12
Thallium (Tl)			0.128		mg/kg		0.075-0.175	30-AUG-12
Uranium (U)			109.9		%		70-130	30-AUG-12
Vanadium (V)			108.4		%		70-130	30-AUG-12
Zinc (Zn)			102.2		%		70-130	30-AUG-12
WG1535134-6 CRM		**VA-NRC-PACS2**						
Antimony (Sb)			104.1		%		70-130	30-AUG-12
Arsenic (As)			107.2		%		70-130	30-AUG-12
Barium (Ba)			126.3		%		70-130	30-AUG-12
Beryllium (Be)			0.42		mg/kg		0.21-0.61	30-AUG-12
Cadmium (Cd)			110.5		%		70-130	30-AUG-12
Chromium (Cr)			104.2		%		70-130	30-AUG-12
Cobalt (Co)			99.3		%		70-130	30-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2427753								
WG1535134-6 CRM		**VA-NRC-PACS2**						
Copper (Cu)			99.8		%		70-130	30-AUG-12
Lead (Pb)			100.1		%		70-130	30-AUG-12
Molybdenum (Mo)			108.8		%		70-130	30-AUG-12
Nickel (Ni)			104.5		%		70-130	30-AUG-12
Selenium (Se)			101.7		%		70-130	30-AUG-12
Silver (Ag)			102.3		%		70-130	30-AUG-12
Thallium (Tl)			99.8		%		70-130	30-AUG-12
Tin (Sn)			106.7		%		70-130	30-AUG-12
Uranium (U)			96.2		%		70-130	30-AUG-12
Vanadium (V)			108.4		%		70-130	30-AUG-12
Zinc (Zn)			103.4		%		70-130	30-AUG-12
WG1535134-1 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	30-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	30-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	30-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	30-AUG-12
Cadmium (Cd)			<0.050		mg/kg		0.05	30-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	30-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	30-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	30-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	30-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	30-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	30-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	30-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	30-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	30-AUG-12
Tin (Sn)			<2.0		mg/kg		2	30-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	30-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	30-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	30-AUG-12
WG1535134-2 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	30-AUG-12
Arsenic (As)			<0.050		mg/kg		0.05	30-AUG-12
Barium (Ba)			<0.50		mg/kg		0.5	30-AUG-12
Beryllium (Be)			<0.20		mg/kg		0.2	30-AUG-12

Quality Control Report

Workorder: L1199893 Report Date: 04-SEP-12

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	**Soil**							
Batch R2427753								
WG1535134-2 MB								
Cadmium (Cd)			<0.050		mg/kg		0.05	30-AUG-12
Chromium (Cr)			<0.50		mg/kg		0.5	30-AUG-12
Cobalt (Co)			<0.10		mg/kg		0.1	30-AUG-12
Copper (Cu)			<0.50		mg/kg		0.5	30-AUG-12
Lead (Pb)			<0.50		mg/kg		0.5	30-AUG-12
Molybdenum (Mo)			<0.50		mg/kg		0.5	30-AUG-12
Nickel (Ni)			<0.50		mg/kg		0.5	30-AUG-12
Selenium (Se)			<0.20		mg/kg		0.2	30-AUG-12
Silver (Ag)			<0.10		mg/kg		0.1	30-AUG-12
Thallium (Tl)			<0.050		mg/kg		0.05	30-AUG-12
Tin (Sn)			<2.0		mg/kg		2	30-AUG-12
Uranium (U)			<0.050		mg/kg		0.05	30-AUG-12
Vanadium (V)			<0.20		mg/kg		0.2	30-AUG-12
Zinc (Zn)			<1.0		mg/kg		1	30-AUG-12
MOISTURE-VA	**Soil**							
Batch R2425055								
WG1535128-2 LCS								
Moisture			99.9		%		90-110	28-AUG-12
WG1535128-1 MB								
Moisture			<0.25		%		0.25	28-AUG-12
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2425933								
WG1535139-4 IRM		**ALS PAH1 RM**						
Acenaphthene			91.5		%		60-130	30-AUG-12
Acenaphthylene			96.5		%		60-130	30-AUG-12
Anthracene			87.2		%		60-130	30-AUG-12
Benz(a)anthracene			105.0		%		60-130	30-AUG-12
Benzo(a)pyrene			102.4		%		60-130	30-AUG-12
Benzo(b)fluoranthene			102.9		%		60-130	30-AUG-12
Benzo(g,h,i)perylene			113.1		%		60-130	30-AUG-12
Benzo(k)fluoranthene			106.7		%		60-130	30-AUG-12
Chrysene			105.3		%		60-130	30-AUG-12
Dibenz(a,h)anthracene			107.7		%		60-130	30-AUG-12
Fluoranthene			100.8		%		60-130	30-AUG-12
Fluorene			87.4		%		60-130	30-AUG-12

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2425933								
WG1535139-4 IRM		**ALS PAH1 RM**						
Indeno(1,2,3-c,d)pyrene			104.4		%		60-130	30-AUG-12
2-Methylnaphthalene			97.5		%		60-130	30-AUG-12
Naphthalene			92.0		%		50-130	30-AUG-12
Phenanthrene			101.9		%		60-130	30-AUG-12
Pyrene			102.9		%		60-130	30-AUG-12
WG1535139-1 MB								
Acenaphthene			<0.0050		mg/kg		0.005	30-AUG-12
Acenaphthylene			<0.0050		mg/kg		0.005	30-AUG-12
Anthracene			<0.0040		mg/kg		0.004	30-AUG-12
Benz(a)anthracene			<0.010		mg/kg		0.01	30-AUG-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	30-AUG-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	30-AUG-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	30-AUG-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	30-AUG-12
Chrysene			<0.010		mg/kg		0.01	30-AUG-12
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	30-AUG-12
Fluoranthene			<0.010		mg/kg		0.01	30-AUG-12
Fluorene			<0.010		mg/kg		0.01	30-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.010		mg/kg		0.01	30-AUG-12
2-Methylnaphthalene			<0.010		mg/kg		0.01	30-AUG-12
Naphthalene			<0.010		mg/kg		0.01	30-AUG-12
Phenanthrene			<0.010		mg/kg		0.01	30-AUG-12
Pyrene			<0.010		mg/kg		0.01	30-AUG-12
Surrogate: Naphthalene d8			91.3		%		50-130	30-AUG-12
Surrogate: Acenaphthene d10			93.0		%		60-130	30-AUG-12
Surrogate: Phenanthrene d10			96.9		%		60-130	30-AUG-12
Surrogate: Chrysene d12			105.4		%		60-130	30-AUG-12
Batch R2427788								
WG1536952-4 IRM		**ALS PAH1 RM**						
Acenaphthene			90.1		%		60-130	31-AUG-12
Acenaphthylene			83.2		%		60-130	31-AUG-12
Anthracene			78.3		%		60-130	31-AUG-12
Benz(a)anthracene			96.1		%		60-130	31-AUG-12
Benzo(a)pyrene			95.3		%		60-130	31-AUG-12
Benzo(b)fluoranthene			98.2		%		60-130	31-AUG-12

Quality Control Report

Workorder: L1199893 Report Date: 04-SEP-12

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	**Soil**							
Batch R2427788								
WG1536952-4 IRM		**ALS PAH1 RM**						
Benzo(g,h,i)perylene			111.7		%		60-130	31-AUG-12
Benzo(k)fluoranthene			97.7		%		60-130	31-AUG-12
Chrysene			104.1		%		60-130	31-AUG-12
Dibenz(a,h)anthracene			108.1		%		60-130	31-AUG-12
Fluoranthene			102.6		%		60-130	31-AUG-12
Fluorene			81.5		%		60-130	31-AUG-12
Indeno(1,2,3-c,d)pyrene			100.2		%		60-130	31-AUG-12
2-Methylnaphthalene			95.9		%		60-130	31-AUG-12
Naphthalene			86.9		%		50-130	31-AUG-12
Phenanthrene			101.0		%		60-130	31-AUG-12
Pyrene			102.8		%		60-130	31-AUG-12
WG1536952-1 MB								
Acenaphthene			<0.0050		mg/kg		0.005	31-AUG-12
Acenaphthylene			<0.0050		mg/kg		0.005	31-AUG-12
Anthracene			<0.0040		mg/kg		0.004	31-AUG-12
Benz(a)anthracene			<0.010		mg/kg		0.01	31-AUG-12
Benzo(a)pyrene			<0.010		mg/kg		0.01	31-AUG-12
Benzo(b)fluoranthene			<0.010		mg/kg		0.01	31-AUG-12
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	31-AUG-12
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	31-AUG-12
Chrysene			<0.010		mg/kg		0.01	31-AUG-12
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	31-AUG-12
Fluoranthene			<0.010		mg/kg		0.01	31-AUG-12
Fluorene			<0.010		mg/kg		0.01	31-AUG-12
Indeno(1,2,3-c,d)pyrene			<0.010		mg/kg		0.01	31-AUG-12
2-Methylnaphthalene			<0.010		mg/kg		0.01	31-AUG-12
Naphthalene			<0.010		mg/kg		0.01	31-AUG-12
Phenanthrene			<0.010		mg/kg		0.01	31-AUG-12
Pyrene			<0.010		mg/kg		0.01	31-AUG-12
Surrogate: Naphthalene d8			86.5		%		50-130	31-AUG-12
Surrogate: Acenaphthene d10			87.3		%		60-130	31-AUG-12
Surrogate: Phenanthrene d10			84.7		%		60-130	31-AUG-12
Surrogate: Chrysene d12			78.3		%		60-130	31-AUG-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
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
J	Duplicate results and limits are expressed in terms of absolute difference.
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.

L1199893

ALS Environmental
excellence in analytical testing

1988 Triumph Street, Vancouver, BC Canada V5L 1K5
Tel: 604-253-4188 Toll Free: 1-800-665-0243 Fax: 604-253-6700

#2 -21 Highfield Circle SE, Calgary, AB Canada T2G 5N6
Tel: 403-214-5431 Toll Free: 1-866-722-6231 Fax: 403-214-5430

www.alsenviro.com

CHAIN OF CUSTODY / ANALYTIC

L1199893-COFC

SEND REPORT TO:

COMPANY:	SLR Consulting		
ADDRESS:	6-40 Cadillac Ave.		
CITY:	Victoria	PROV: BC	POSTAL CODE: V8Z 1T2
CONTACT:	Becky MacInnis	TELEPHONE:	1-250-475-9595
PROJECT NAME/#:	205.03575.00000	SAMPLER:	Marci Martin
ALSE QUOTE #:	PWGSC pricing	ALSE CONTACT:	Elle Diniz

REPORT FORMAT:
- ○ Hardcopy ○ Fax #:
- ◉ E-mail Specify file type:
- E-mail Address: jnyman@slrconsulting.com

INVOICE FORMAT:
- ◉ Hardcopy ○ Fax #:
- ○ E-mail (pdf format)
- E-mail Address:

- ◉ Routine Turn Around
- ○ Rush (Surcharges May Apply) Specify Due Date: Time:

CO CONTACT:
AD P.O. #:
CIT ODE: TEL:

Require copy of Report? ☐ Yes ☑ No

ANALYSIS REQUESTED:

WO #	SAMPLE IDENTIFICATION	DATE / TIME COLLECTED YY-MM-DD	Time	MATRIX	CCME Metals	PAH	HOLD	NOTES (sample specific comments, due dates, etc.)
	SP-15	12-08-24		sed./soil	X	X		
	SP-16	12-08-24		sed./soil	X	X		
	SP-17	12-08-24		sed./soil	X	X		
	DUP-2	12-08-24		sed./soil	X	X		

FOR LAB USE ONLY

RELINQUISHED BY:				RECEIVED BY:			
NAME:	Marci Martin	DATE:	24-Aug-12	NAME:		DATE:	Aug 25
OF:	SLR Consulting	TIME:	4:00 PM	OF:		TIME:	10:30
NAME:		DATE:		NAME:		DATE:	
OF:		TIME:		OF:	ALS Environmental	TIME:	

Special Instructions / Comments (billing details, QC reporting, etc.): Please send to mdbirse@slrconsulting.com as well

FOR LAB USE ONLY Cooler Seal Intact? Yes___ No___ N/A___ Sample Temperature: 5 °C Frozen? Yes___ No___ Cooling Method? Icepacks___ Ice___ None___