



**SOIL SAMPLING AND ANALYTICAL TESTING
ALLANDALE TRAIN STATION PROPERTY
BARRIE, ONTARIO
FOR
THE CORPORATION OF THE CITY OF BARRIE**

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PML Ref.: 13BX001
Report: 1
February 2013

February 28, 2013

PML Ref.: 13BX001
Report: 1

Mr. Robert Kahle, P.Eng.
The Corporation of the City of Barrie
Engineering Department
P.O. Box 400
70 Collier Street
Barrie, Ontario
L4M 4T5

Dear Mr. Kahle

Soil Sampling and Analytical Testing
Allandale Train Station Property
Barrie, Ontario

This letter provides the results of a soil sampling and analytical testing program conducted in regards to the Allandale Train Station property in Barrie, Ontario. Authorization for this assignment was provided by Mr. Kahle, in an email dated January 18, 2013.

The purpose of this assignment was to assess if the environmental quality of site soils conform to regulatory environmental quality standards for the site.

Soil Sampling

As requested by the Client, soil samples were retrieved from three areas as described below. The sampling and handling procedures were carried out in accordance with the supporting documents of O.Reg. 153/04, as amended. The recovered soil samples were placed in laboratory provided air tight glass containers and stored in an insulated cooler for transportation to the laboratory.

Area 1: Entire Allandale Train Station Property

Near surface soil samples were retrieved at a frequency of one sample per 200 m² over the entire property, resulting in a total of 58 soil samples, S1 to S58, as shown on Drawing 1, appended.



The sampling was carried out on February 7, 2013, using an excavator with a ripper to excavate through the frozen ground prevalent at the time. In this regard, the ground was frozen to a depth of about 500 mm at which point the soil samples were retrieved.

From viewing the excavations, the site was characterized by zero to about 150 mm of topsoil over fill comprising sand with some gravel.

Area 2: North Edge of Road Embankment for the Access Road on GO Transit Property,
South of the Allandale Train Station Property

On January 25, 2013, three near surface soil samples, S59, S60 and S61, were retrieved from the top of the embankment, near the north edge of the road shoulder, at the locations shown on Drawing 1.

The ground was frozen, and after arduous manual digging, the soil samples were retrieved at a depth of about 150 mm. The samples comprised sand with some gravel.

Area 3: Area of Former Soil Stockpile, East of William Street Culvert

This area was identified by the Client as the location of a former soil stockpile that was subsequently disposed off-site. It is understood that the stockpile consisted of soil that was environmentally impacted with mercury. In addition to the quality of the near surface soil, the quality of the soils at depth was of interest. In this regard, Boreholes 1 to 3 were carried out to a depth of 5.0 to 5.8 m for purposes of collecting samples of the subsurface soils. The locations of the boreholes are shown on Drawing 1.

A specialist drilling contractor was retained to advance the boreholes, using a hydraulic drill rig. Soil samples were retrieved at 760 mm depth intervals using a conventional split spoon sampler. A total of 23 soil samples were collected (7 or 8 samples per borehole).



The log of Boreholes 1 to 3, are appended, which show the subsurface stratigraphy comprises a topsoil mantle, over a layer of sand fill down to 2.9 m depth, over a native deposit of sand, with local interbeds of silty sand or sandy silt.

Analytical Testing Program

Based on the historical land use, laboratory testing was carried out for following suite of parameters:

- Metals and Inorganics
- Petroleum Hydrocarbons (PHC's) F1 to F4 Fractions
- Volatile Organic Compounds (VOC's)
- Polycyclic Aromatic Hydrocarbons (PAH's)

The following soil samples were submitted for testing:

Area 1: (58 Samples):	Soil Samples S1 to S58	
Area 2: (3 Samples):	Soil Samples S59, S60 and S61	
Area 3: (5 Samples):	Borehole 1 / Sample 3	Fill at 1.5 to 1.9 m
	Borehole 1 / Sample 5	Sand at 3.1 to 3.5 m
	Borehole 2 / Sample 4	Fill at 2.3 to 2.7 m
	Borehole 2 / Sample 6	Sand at 3.8 to 4.2 m
	Borehole 3 / Sample 5	Sand at 3.1 to 3.5 m

Further to the above, because of mercury that was reported in the former soil stockpile, testing for Metals and Inorganics was carried out on additional soil samples, Borehole 1 / Sample 8 at 5.4 to 5.8 m, Borehole 2 / Sample 7 at 4.6 to 5.0 m, and Borehole 3 / Sample 8 at 5.4 to 5.8 m.

The analytical testing on the soil samples was carried out by AGAT Laboratories in Mississauga, Ontario, accredited by Canadian Association for Laboratory Accreditation Inc.



Pertinent Regulatory Standards

Applicable site environmental quality standards depend on the site location, land use, soil texture and source of potable water at the site. In this regard, we selected the Generic Criteria of the O. Reg. 153/04, Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, dated April 15, 2011.

Section 41 and 43 of O.Reg. 153/04, as amended, was used to evaluate the site sensitivity. The site is not considered a "sensitive site".

Further, the site was reviewed against the City's wells and well head protective areas (Schedule G, dated March 2011), wherein the site is located within a well head protective area.

Based on the above reviews, the criteria of Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Industrial/Commercial/Community (ICC) land use is applicable to the site. (Table 2 ICC Site Condition Standards)

Findings

The Laboratory Certificates of Analysis and accompanying Quality Assurance documents are attached in Appendix A. In summary, the concentration of the measured parameters in the submitted soil samples were either not detected (below the method detection limit) or were within the Table 2 ICC Site Condition Standards, except as follows:

- Sodium Adsorption Ratio (SAR) of 70.9, 46.1 and 78.2 in the three Soil Samples, S59, S60 and S61, from the north edge of the road embankment on the Go Transit Property (guideline value is 12);
- Electrical Conductivity (EC) of 8.06, 3.91 and 6.90 mS/cm in the three Soil Samples, S59, S60 and S61, from the north edge of the road embankment on the GO Transit Property (guideline value is 1.4 mS/cm);

The elevated levels of EC and SAR in the three road embankment samples are considered associated with winter de-icing operations, as might be expected.



Other than the exceedences noted above, based on the samples tested, the near surface soils throughout the site conform to the Table 2 ICC Site Condition Standards. Further, the underlying soils in the area of the former non-conforming soil stockpile, east of the William Street Culvert, also meet the Table 2 ICC Site Condition Standards.

This assessment is subject to the Statement of Limitations that is included with this report (Appendix B) which must be read in conjunction with the report.

Closure

We trust this report is complete within our terms of reference, and the information provided is sufficient for your present purposes. If you have any questions, or when we may be of further assistance, please do not hesitate to call our office.

Sincerely

Peto MacCallum Ltd.



Turney Lee-Bun, P.Eng.
President

TLB:jlb

Enclosure(s):

List of Abbreviations
Log of Borehole No. 1 to 3
Drawing 1 - Sample and Borehole Location Plan
Appendix A - Certificate of Analysis
Appendix B - Statement of Limitations

LIST OF ABBREVIATIONS



PENETRATION RESISTANCE

Standard Penetration Resistance N: - The number of blows required to advance a standard split spoon sampler 0.3 m into the subsoil. Driven by means of a 63.5 kg hammer falling freely a distance of 0.76 m.

Dynamic Penetration Resistance: - The number of blows required to advance a 51 mm, 60 degree cone, fitted to the end of drill rods, 0.3 m into the subsoil. The driving energy being 475 J per blow.

DESCRIPTION OF SOIL

The consistency of cohesive soils and the relative density or denseness of cohesionless soils are described in the following terms:

<u>CONSISTENCY</u>	<u>N (blows/0.3 m)</u>	<u>c (kPa)</u>	<u>DENSENESS</u>	<u>N (blows/0.3 m)</u>
Very Soft	0 - 2	0 - 12	Very Loose	0 - 4
Soft	2 - 4	12 - 25	Loose	4 - 10
Firm	4 - 8	25 - 50	Compact	10 - 30
Stiff	8 - 15	50 - 100	Dense	30 - 50
Very Stiff	15 - 30	100 - 200	Very Dense	> 50
Hard	> 30	> 200		
WTPL	Wetter Than Plastic Limit			
APL	About Plastic Limit			
DTPL	Drier Than Plastic Limit			

TYPE OF SAMPLE

SS	Split Spoon	TW	Thinwall Open
WS	Washed Sample	TP	Thinwall Piston
SB	Scraper Bucket Sample	OS	Oesterberg Sample
AS	Auger Sample	FS	Foil Sample
CS	Chunk Sample	RC	Rock Core
ST	Slotted Tube Sample		
	PH	Sample Advanced Hydraulically	
	PM	Sample Advanced Manually	

SOIL TESTS

Qu	Unconfined Compression	LV	Laboratory Vane
Q	Undrained Triaxial	FV	Field Vane
Qcu	Consolidated Undrained Triaxial	C	Consolidation
Qd	Drained Triaxial		

LOG OF BOREHOLE NO. 1

PROJECT Soil Sampling and Chemical Testing - Allendale Train Station Property

OUR PROJECT NO. 13BX001

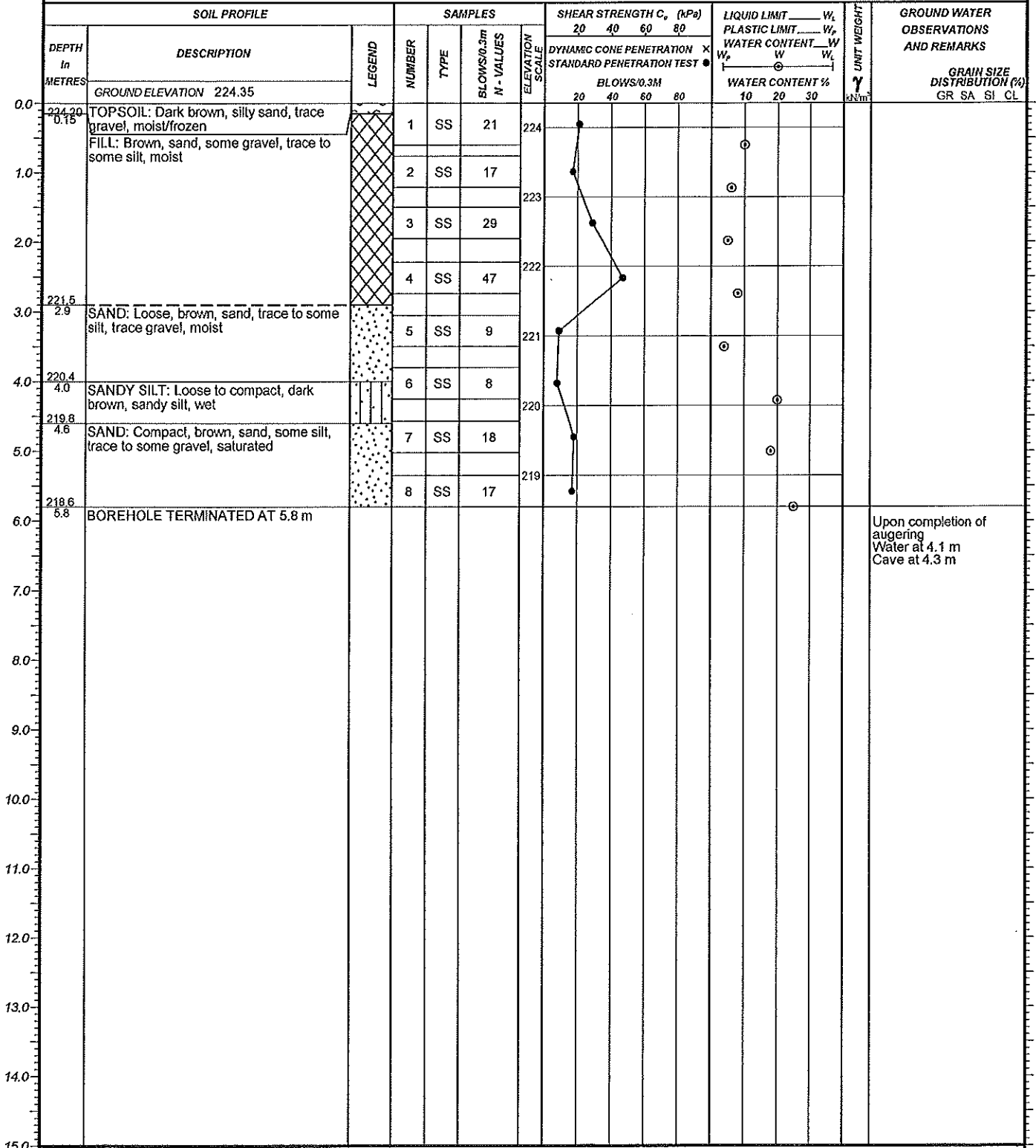
LOCATION Barrie, Ontario

BORING DATE: January 31, 2013

ENGINEER GW

BORING METHOD Continuous Flight Solid Stem Augers

TECHNICIAN JH



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 2

PROJECT Soil Sampling and Chemical Testing - Allendale Train Station Property

LOCATION Barrie, Ontario

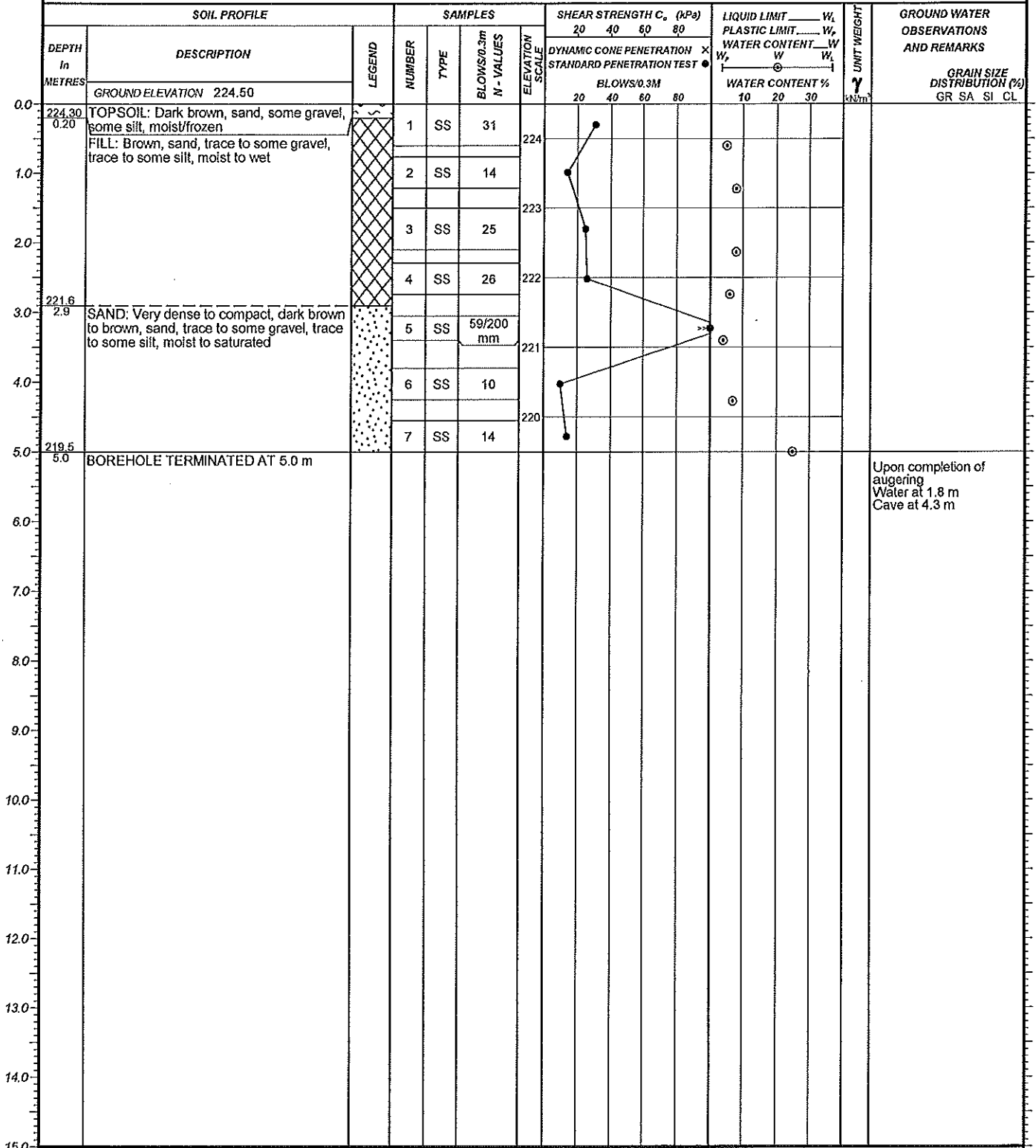
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 31, 2013

OUR PROJECT NO. 13BX001

ENGINEER GW

TECHNICIAN JH



NOTES:

+¹ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 3

PROJECT Soil Sampling and Chemical Testing - Allendale Train Station Property

LOCATION Barrie, Ontario

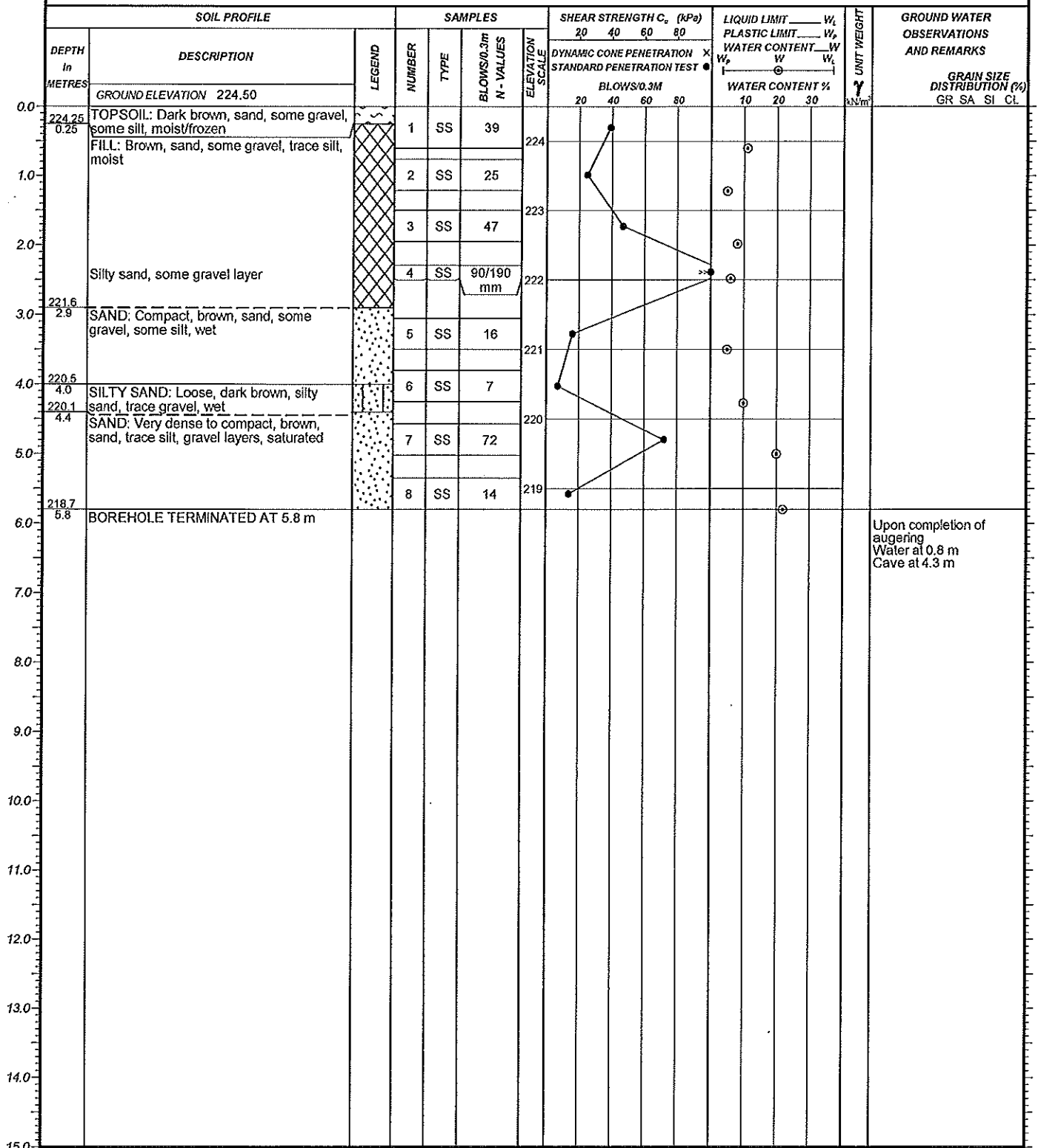
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 31, 2013

OUR PROJECT NO. 13BX001

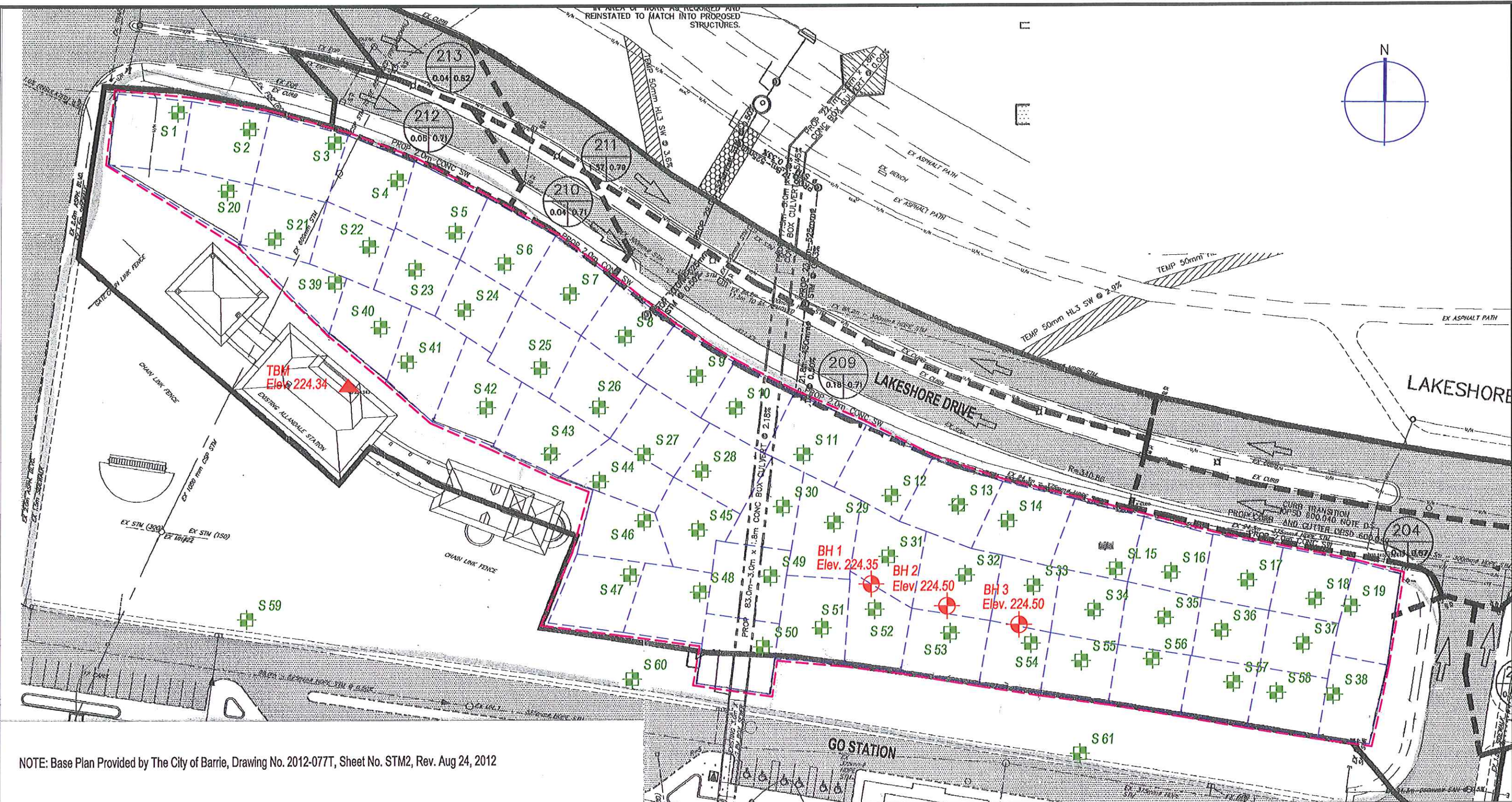
ENGINEER GW

TECHNICIAN JH



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY



LEGEND

- BH 1
Elev. 224.35
⊕ Borehole 1
- S 1
⊕ Ground Surface Elevation
 (Staked by The City of Barrie)
- S 1
⊕ Sample Location 1
- Approximate Limits of 200m² Sections
- Project Limits Provided by The City of Barrie
- ▲ TBM
Elev. 224.34 Temporary Bench Mark
 Finished Floor Elevation of the Allendale Train
 Station. Located just south of the Tiffin
 Street/Lakeshore Drive Intersection
 Elev. 224.34 (metric, geodetic)

SAMPLE AND BOREHOLE LOCATION PLAN

SOIL SAMPLING AND CHEMICAL TESTING
ALLANDALE TRAIN STATION PROPERTY
BARRIE, ONTARIO

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS

DATE	SCALE	JOB NO.	DRAWING NO.
FEBRUARY 2013	N.T.S.	13BX001	1



APPENDIX A

Certificates of Analysis



AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905) 712-5100
FAX (905) 712-5122
<http://www.agatlabs.com>

CLIENT NAME: PETO MACCALLUM
19 CHURCHILL DRIVE
BARRIE, ON L4N8Z5
(705) 734-3900

ATTENTION TO: Geoff White

PROJECT NO: 13BX001

AGAT WORK ORDER: 13T687573

SOIL ANALYSIS REVIEWED BY: Inesa Alizarchyk, Inorganic Lab Supervisor

TRACE ORGANICS REVIEWED BY: Oksana Gushyla, Analyst

DATE REPORTED: Feb 19, 2013

PAGES (INCLUDING COVER): 51

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***NOTES**

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

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Member of: Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.

Results relate only to the items tested and to all the items tested



AGAT

Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)									
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19					
Parameter	Unit	SAMPLE DESCRIPTION:		SAMPLE TYPE:		DATE SAMPLED:		DATE REPORTED:	
		G/S	RDL	S1	S2	S3	S4	S5	S6
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	<1	<1	<1	1	1	1
Barium	µg/g	670	2	21	18	17	19	16	15
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	6	6	4	6	5	5
Cobalt	µg/g	80	0.5	2.2	2.0	1.7	2.1	1.9	2.0
Copper	µg/g	230	1	5	5	6	5	5	8
Lead	µg/g	120	1	2	4	8	2	2	2
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel	µg/g	270	1	4	4	4	6	8	7
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	11	12	8	13	11	11
Zinc	µg/g	340	5	13	14	16	13	12	11
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.086	0.098	0.113	0.114	0.089	0.121
Sodium Adsorption Ratio	NA	12	NA	0.147	0.251	2.23	0.284	0.148	0.425
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.95	7.88	7.83	7.93	7.79	7.87

Certified By:



AGAT Laboratories

Certificate of Analysis

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CLIENT NAME: PETO MACCALLUM

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O. Reg. 153(511) - Metals & Inorganics (Soil)												
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19								
Parameter	Unit	SAMPLE DESCRIPTION:		S9	S10	S11	S12	S13	S14	S15	S16	
		SAMPLE TYPE:										
		DATE SAMPLED:										
G / S	RDL	2/7/2013	2/7/2013	4126857	4126865	4126861	4126865	4126869	4126873	4126877	4126881	
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	1	1	1	1	1	1	1	1	1
Barium	µg/g	670	2	16	17	18	15	19	22	19	21	21
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	5	5	5	5	6	6	6	6	6
Cobalt	µg/g	80	0.5	1.9	1.6	2.0	1.9	2.1	2.3	2.0	2.3	2.3
Copper	µg/g	230	1	5	7	4	4	5	5	5	5	5
Lead	µg/g	120	1	2	9	2	2	2	2	2	2	2
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel	µg/g	270	1	3	3	4	4	4	4	4	4	4
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	11	13	12	10	14	13	12	13	13
Zinc	µg/g	340	5	11	48	12	11	13	14	12	13	13
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	1.25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.107	0.131	0.092	0.084	0.083	0.094	0.098	0.093	0.093
Sodium Adsorption Ratio	NA	12	NA	0.430	1.73	0.191	0.253	0.196	0.212	0.254	0.225	0.225
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.87	7.87	7.80	7.79	7.82	7.81	7.71	7.84	7.84

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)												DATE REPORTED: 2013-02-19			
SAMPLE DESCRIPTION:															
SAMPLE TYPE:															
DATE SAMPLED:															
G / S RDL															
Parameter	Unit	G / S	RDL	S17	S18	S19	S20	S21	S22	S23	S24				
				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8		
Arsenic	µg/g	18	1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Barium	µg/g	670	2	20	14	20	18	20	16	15	20	20	20		
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Chromium	µg/g	160	2	5	4	6	6	7	6	6	8	8	8		
Cobalt	µg/g	80	0.5	2.2	1.2	2.0	2.2	2.3	2.1	2.1	2.3	2.3	2.3		
Copper	µg/g	230	1	6	3	7	5	6	5	4	5	5	5		
Lead	µg/g	120	1	5	3	5	4	8	2	2	2	2	2		
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Nickel	µg/g	270	1	12	3	6	4	8	3	3	4	4	4		
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Vanadium	µg/g	86	1	12	9	13	15	15	13	15	18	18	18		
Zinc	µg/g	340	5	16	12	25	14	17	12	11	13	13	13		
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040		
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.161	0.240	0.128	0.085	0.102	0.081	0.079	0.177	0.177	0.177		
Sodium Adsorption Ratio	NA	12	NA	1.24	2.00	1.85	0.145	0.379	0.140	0.129	1.50	1.50	1.50		
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.78	7.83	7.82	7.73	7.82	7.89	7.83	7.89	7.89	7.89		

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)														DATE REPORTED: 2013-02-19			
DATE RECEIVED: 2013-02-11																	
SAMPLE DESCRIPTION:																	
SAMPLE TYPE:																	
DATE SAMPLED:																	
Parameter	Unit	G / S	RDL	S25	S26	S27	S28	S29	S30	S31	S32						
				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8						
Arsenic	µg/g	18	1	<1	<1	<1	<1	<1	<1	<1	<1						
Barium	µg/g	670	2	20	24	21	20	19	13	14	16						
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5						
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5						
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5						
Chromium	µg/g	160	2	7	8	8	7	7	5	7	7						
Cobalt	µg/g	80	0.5	2.3	2.5	2.6	2.3	2.2	1.9	2.2	2.2						
Copper	µg/g	230	1	5	6	5	5	5	4	5	5						
Lead	µg/g	120	1	3	3	2	2	2	1	2	2						
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5						
Nickel	µg/g	270	1	6	4	5	4	4	3	5	4						
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4						
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2						
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4						
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5						
Vanadium	µg/g	86	1	16	15	16	18	14	14	15	18						
Zinc	µg/g	340	5	15	15	14	14	13	10	11	12						
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2						
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040						
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.102	0.098	0.115	0.085	0.079	0.076	0.082	0.081						
Sodium Adsorption Ratio	NA	12	NA	0.457	0.305	0.483	0.266	0.109	0.351	0.195	0.185						
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.90	7.91	7.87	7.86	7.92	7.93	7.77	7.85						

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)										DATE REPORTED: 2013-02-19			
DATE RECEIVED: 2013-02-11													
Parameter	Unit	SAMPLE DESCRIPTION:		S33 Soil	S34 Soil	S35 Soil	S36 Soil	S37 Soil	S38 Soil	S39 Soil	S40 Soil		
		G/S	RDL									2/7/2013	4126962
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	2/7/2013	4126986
Arsenic	µg/g	18	1	<1	<1	1	1	<1	<1	<1	<1	2/7/2013	4126991
Barium	µg/g	670	2	18	23	20	25	17	13	19	21	2/7/2013	4126986
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2/7/2013	4126986
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5	2/7/2013	4126986
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	0.14	0.14	<0.10	<0.10	2/7/2013	4126986
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2/7/2013	4126986
Chromium	µg/g	160	2	6	9	6	8	5	4	6	6	2/7/2013	4126986
Cobalt	µg/g	80	0.5	2.2	2.5	2.1	2.7	1.8	1.4	2.2	2.3	2/7/2013	4126986
Copper	µg/g	230	1	7	5	5	8	6	6	5	5	2/7/2013	4126986
Lead	µg/g	120	1	2	3	2	7	8	7	2	3	2/7/2013	4126986
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2/7/2013	4126986
Nickel	µg/g	270	1	4	4	4	5	3	7	4	4	2/7/2013	4126986
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	2/7/2013	4126986
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2/7/2013	4126986
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	2/7/2013	4126986
Uranium	µg/g	33	0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	2/7/2013	4126986
Vanadium	µg/g	86	1	17	18	14	16	12	9	13	13	2/7/2013	4126986
Zinc	µg/g	340	5	13	16	13	22	14	14	13	14	2/7/2013	4126986
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2/7/2013	4126986
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	2/7/2013	4126986
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	2/7/2013	4126986
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.083	0.100	0.093	0.141	0.261	0.150	0.092	0.092	2/7/2013	4126986
Sodium Adsorption Ratio	NA	12	NA	0.120	0.309	0.317	0.646	3.16	2.77	0.279	0.366	2/7/2013	4126986
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.80	7.80	7.85	7.78	7.83	7.79	7.85	7.80	2/7/2013	4126986

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S41 Soil 27/2013 4127002	S42 Soil 27/2013 4127006	S43 Soil 27/2013 4127010	S44 Soil 27/2013 4127014	S45 Soil 27/2013 4127018	S46 Soil 27/2013 4127022	S47 Soil 27/2013 4127026	S48 Soil 27/2013 4127304
		G / S	RDL								
Antimony	µg/g	40	0.8	<0.8	1.6	<0.8	<0.8	<0.8	<0.8	2.0	<0.8
Arsenic	µg/g	18	1	1	2	1	1	1	1	2	1
Barium	µg/g	670	2	16	26	21	20	16	16	24	15
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	0.15	<0.10	<0.10	<0.10	<0.10	0.14	<0.10
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	5	8	6	7	8	5	5	5
Cobalt	µg/g	80	0.5	1.9	3.0	2.2	2.4	1.8	1.9	2.1	1.9
Copper	µg/g	230	1	4	28	10	6	5	4	21	5
Lead	µg/g	120	1	2	46	5	2	2	2	43	2
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel	µg/g	270	1	3	8	4	4	10	3	9	4
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	11	15	13	15	11	11	12	11
Zinc	µg/g	340	5	11	65	16	14	11	12	44	11
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.087	0.104	0.091	0.087	0.082	0.086	0.215	0.082
Sodium Adsorption Ratio	NA	12	NA	0.269	0.177	0.201	0.177	0.154	0.170	4.63	0.314
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.76	7.78	7.78	7.83	7.87	7.87	7.87	7.86

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

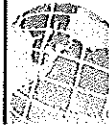
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S49	S50	S51	S52	S53	S54	S55	S56
		SAMPLE TYPE:									
		DATE SAMPLED:									
G / S	RDL	2/7/2013	2/7/2013	4127308	4127312	4127316	4127320	4127324	4127328	4127332	4127336
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	0.9	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	1	<1	1	1	2	<1	<1	<1
Barium	µg/g	670	2	19	14	20	15	26	18	25	22
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5	<5	<5
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	6	5	6	5	8	6	7	7
Cobalt	µg/g	80	0.5	2.2	1.7	2.4	1.8	2.9	2.1	2.4	2.7
Copper	µg/g	230	1	5	4	7	4	24	5	5	5
Lead	µg/g	120	1	2	2	3	2	29	3	2	4
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel	µg/g	270	1	4	3	5	3	7	4	4	4
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	13	10	13	11	16	15	16	15
Zinc	µg/g	340	5	13	11	17	10	41	13	14	15
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.085	0.086	0.090	0.091	0.115	0.089	0.093	0.101
Sodium Adsorption Ratio	NA	12	NA	0.213	0.254	0.179	0.273	0.185	0.160	0.248	0.332
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.92	7.83	7.95	7.93	7.77	7.86	7.94	7.91

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

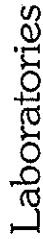
ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)									
DATE RECEIVED: 2013-02-11					DATE REPORTED: 2013-02-19				
SAMPLE DESCRIPTION: S57 S58									
SAMPLE TYPE: Soil Soil									
DATE SAMPLED: 2/7/2013 2/7/2013									
G / S RDL 4127340 4127344									
Parameter	Unit	G / S	RDL	S57	S58				
Antimony	µg/g	40	0.8	<0.8	<0.8				
Arsenic	µg/g	18	1	<1	<1				
Barium	µg/g	670	2	20	17				
Beryllium	µg/g	8	0.5	<0.5	<0.5				
Boron	µg/g	120	5	<5	<5				
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	0.11				
Cadmium	µg/g	1.9	0.5	<0.5	<0.5				
Chromium	µg/g	160	2	7	5				
Cobalt	µg/g	80	0.5	2.3	1.7				
Copper	µg/g	230	1	6	6				
Lead	µg/g	120	1	3	5				
Molybdenum	µg/g	40	0.5	<0.5	<0.5				
Nickel	µg/g	270	1	4	4				
Selenium	µg/g	5.5	0.4	<0.4	<0.4				
Silver	µg/g	40	0.2	<0.2	<0.2				
Thallium	µg/g	3.3	0.4	<0.4	<0.4				
Uranium	µg/g	33	0.5	1.1	<0.5				
Vanadium	µg/g	86	1	15	12				
Zinc	µg/g	340	5	15	16				
Chromium VI	µg/g	8	0.2	<0.2	<0.2				
Cyanide	µg/g	0.051	0.040	<0.040	<0.040				
Mercury	µg/g	3.9	0.10	<0.10	<0.10				
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.111	0.277				
Sodium Adsorption Ratio	NA	12	NA	0.797	3.99				
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.94	8.09				

Comments: RDL - Reported Detection Limit G / S - Guideline / Standard: Refers to T2(CC) - Current

4126824-4127344 EC & SAR were determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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AME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)

O. Reg. 153(511) - PAHs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S1 Soil 2/7/2013 4126824	S2 Soil 2/7/2013 4126825	S3 Soil 2/7/2013 4126829	S4 Soil 2/7/2013 4126833	S5 Soil 2/7/2013 4126837	S6 Soil 2/7/2013 4126841	S7 Soil 2/7/2013 4126845	S8 Soil 2/7/2013 4126849
		DATE SAMPLED:	RDL								
		G / S									
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%	0.1		4.7	3.5	5.1	5.5	4.4	5.4	6.1	3.6
Surrogate	Unit	Acceptable Limits									
	%	50-140		81	87	124	116	85	97	94	95
Chrysene-d12	%										

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Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)										DATE REPORTED: 2013-02-19			
SAMPLE DESCRIPTION:													
Parameter	Unit	SAMPLE TYPE:		S9	S10	S11	S12	S13	S14	S15	S16		
		DATE SAMPLED:	RDL									Soil	Soil
		G / S											
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	0.10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	5.7	7.2	5.2	4.5	5.2	5.2	6.0	4.9		
Surrogate	Unit	Acceptable Limits											
	%	50-140		101	115	89	69	91	88	71	68		
Chrysene-d12	%												



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PROJECT NO: 13BX001

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ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)

DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S17	S18	S19	S20	S21	S22	S23	S24
		DATE SAMPLED:	SAMPLE TYPE:								
		G / S	RDL	2/7/2013	4126889	4126893	4126897	4126903	4126908	4126913	4126918
Naphthalene	µg/g	9.6	0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	0.31	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	5.8	5.4	5.1	4.5	5.9	4.8	4.8	6.8
Surrogate	Unit	Acceptable Limits									
Chrysene-d12	%	50-140		68	85	88	75	77	70	71	76

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AGAT WORK ORDER: 13T687573
PROJECT NO: 13BX001

CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S25 Soil 2/7/2013 4126923	S26 Soil 2/7/2013 4126928	S27 Soil 2/7/2013 4126932	S28 Soil 2/7/2013 4126938	S29 Soil 2/7/2013 4126943	S30 Soil 2/7/2013 4126948	S31 Soil 2/7/2013 4126954	S32 Soil 2/7/2013 4126958
		G / S	RDL								
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	5.4	5.4	5.2	5.1	5.0	3.3	3.8	3.6
Surrogate	Unit	Acceptable Limits									
	%	50-140									
Chrysene-d12	%										
				76	67	62	68	67	63	79	82

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S33 Soil 2/7/2013 4126962	S34 Soil 2/7/2013 4126966	S35 Soil 2/7/2013 4126970	S36 Soil 2/7/2013 4126974	S37 Soil 2/7/2013 4126978	S38 Soil 2/7/2013 4126982	S39 Soil 2/7/2013 4126986	S40 Soil 2/7/2013 4126991
		DATE SAMPLED:	RDL								
	G/S										
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	4.5	5.1	5.3	5.6	6.0	5.5	5.1	5.2
Surrogate	Unit	Acceptable Limits									
Chrysene-d12	%	50-140		82	81	87	97	68	76	79	74

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Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S41 Soil 2/7/2013 4127002	S42 Soil 2/7/2013 4127006	S43 Soil 2/7/2013 4127010	S44 Soil 2/7/2013 4127014	S45 Soil 2/7/2013 4127018	S46 Soil 2/7/2013 4127022	S47 Soil 2/7/2013 4127026	S48 Soil 2/7/2013 4127304
		DATE SAMPLED:	RDL								
	G / S										
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	0.22	<0.05
Pyrene	µg/g	96	0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.24	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	0.15	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05
Moisture Content	%	0.1	Acceptable Limits	3.8	5.1	5.8	6.3	4.4	5.0	6.1	4.5
Surrogate	Unit										
Chrysene-d12	%	50-140		84	93	84	81	90	109	102	91

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S49	S50	S51	S52	S53	S54	S55	S56
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:	RD L	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013
G / S	RD L	4127308	4127312	4127316	4127320	4127324	4127328	4127332	4127336		
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	0.54	<0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	<0.05	<0.05	<0.05	0.67	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	0.73	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	0.28	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Moisture Content	%	0.1	Acceptable Limits	5.5	5.3	5.5	4.0	7.5	5.7	5.3	5.4
Surrogate	Unit	50-140		96	115	86	77	125	63	84	88
Chrysene-d12	%										

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PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)				DATE REPORTED: 2013-02-19	
DATE RECEIVED: 2013-02-11					
Parameter	Unit	SAMPLE DESCRIPTION:		DATE SAMPLED:	
		G / S	RDL	SS7	SS8
Naphthalene	µg/g	9.6	0.05	2/7/2013	4/12/344
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05
Pyrene	µg/g	96	0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05
Moisture Content	%	0.1	Acceptable Limits	5.7	5.0
Chrysene-d12	%	50-140	94	65	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(CC) - Current
4126824-4127344 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

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O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
SAMPLE DESCRIPTION:				SAMPLE TYPE:		DATE SAMPLED:		DATE SAMPLED:			
Parameter	Unit	G / S	RDL	S1	S2	S3	S4	S5	S6	S7	S8
F1 (C6 to C10)	µg/g	55	5	<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	3300	50	<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	50	NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%	0.1	4.7	5.1	3.5	5.1	5.5	4.4	5.4	6.1	3.6
Surrogate	Unit	Acceptable Limits		89	88	89	119	82	73	89	84
Terphenyl	%	60-140		75							
SAMPLE DESCRIPTION:				SAMPLE TYPE:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:	
Parameter	Unit	G / S	RDL	S9	S10	S11	S12	S13	S14	S15	S16
F1 (C6 to C10)	µg/g	55	5	<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	3300	50	<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	50	NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%	0.1	5.7	5.2	7.2	5.2	4.5	5.2	5.2	6.0	4.9
Surrogate	Unit	Acceptable Limits		95	76	64	83	88	96	108	70
Terphenyl	%	60-140		95							

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O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)									
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19					
SAMPLE DESCRIPTION:		SAMPLE TYPE:		DATE SAMPLED:		G / S		RDL	
Parameter	Unit	S17	S18	S19	S20	S21	S22	S23	S24
F1 (C6 to C10)	µg/g	5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	3300	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%	0.1	5.4	5.1	4.5	5.9	4.8	4.8	6.8
Surrogate	Unit	Acceptable Limits							
Terphenyl	%	60-140							
SAMPLE DESCRIPTION:		SAMPLE TYPE:		DATE SAMPLED:		G / S		RDL	
Parameter	Unit	S25	S26	S27	S28	S29	S30	S31	S32
F1 (C6 to C10)	µg/g	<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	3300	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%	0.1	5.4	5.2	5.1	5.0	3.3	3.8	3.6
Surrogate	Unit	Acceptable Limits							
Terphenyl	%	60-140							

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O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)												
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19								
SAMPLE DESCRIPTION:		SAMPLE TYPE:										
Parameter	Unit	G / S	DATE SAMPLED:	S33	S34	S35	S36	S37	S38	S39	S40	
		RDL										
F1 (C6 to C10)	µg/g	5		<5	<5	<5	<5	<5	<5	<5	<5	
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5	<5	<5	<5	<5	<5	<5	
F2 (C10 to C16)	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10	
F2 (C10 to C16) minus Naphthalene	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10	
F3 (C16 to C34)	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50	
F3 (C16 to C34) minus PAHs	µg/g	1700	50	<50	<50	<50	<50	<50	<50	<50	<50	
F4 (C34 to C50)	µg/g	3300	50	<50	<50	<50	<50	<50	<50	<50	<50	
Gravimetric Heavy Hydrocarbons	µg/g	3300	50	NA	NA	NA	NA	NA	NA	NA	NA	
Moisture Content	%	0.1		4.5	5.1	5.3	5.6	5.9	5.5	5.1	7.0	
Surrogate	Unit	Acceptable Limits										
Terphenyl	%	60-140		94	115	86	120	110	127	87	91	
SAMPLE DESCRIPTION:		SAMPLE TYPE:										
Parameter	Unit	G / S	DATE SAMPLED:	S41	S42	S43	S44	S45	S46	S47	S48	
		RDL										
F1 (C6 to C10)	µg/g	5		<5	<5	<5	<5	<5	<5	5	<5	
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5	<5	<5	<5	<5	<5	<5	
F2 (C10 to C16)	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10	
F2 (C10 to C16) minus Naphthalene	µg/g	230	10	<10	<10	<10	<10	<10	<10	<10	<10	
F3 (C16 to C34)	µg/g	1700	50	<50	66	<50	<50	<50	<50	<50	<50	
F3 (C16 to C34) minus PAHs	µg/g	1700	50	<50	66	<50	<50	<50	<50	<50	<50	
F4 (C34 to C50)	µg/g	3300	50	<50	96	<50	<50	<50	<50	<50	<50	
Gravimetric Heavy Hydrocarbons	µg/g	3300	50	NA	NA	NA	NA	NA	NA	<50	<50	
Moisture Content	%	0.1		3.8	5.1	5.8	6.3	4.4	5.0	6.1	4.5	
Surrogate	Unit	Acceptable Limits										
Terphenyl	%	60-140		109	114	83	80	92	82	100	89	

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O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)									
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19					
SAMPLE DESCRIPTION:		S49	S50	S51	S52	S53	S54	S55	S56
SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:		2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013
G / S		RDL	4127312	4127316	4127320	4127324	4127328	4127332	4127336
Parameter	Unit								
F1 (C6 to C10)	µg/g	5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g	230	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g	1700	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	3300	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%	0.1	5.5	5.5	4.0	7.5	5.7	5.3	5.4
Surrogate	Unit	Acceptable Limits							
Terphenyl	%	60-140	101	74	76	120	91	74	81
SAMPLE DESCRIPTION:		S57	S58						
SAMPLE TYPE:		Soil	Soil						
DATE SAMPLED:		2/7/2013	2/7/2013						
G / S		RDL	4127340	4127344					
Parameter	Unit								
F1 (C6 to C10)	µg/g	5	<5	<5					
F1 (C6 to C10) minus BTEX	µg/g	55	<5	<5					
F2 (C10 to C16)	µg/g	230	<10	<10					
F2 (C10 to C16) minus Naphthalene	µg/g	230	<10	<10					
F3 (C16 to C34)	µg/g	1700	<50	<50					
F3 (C16 to C34) minus PAHs	µg/g	1700	<50	<50					
F4 (C34 to C50)	µg/g	3300	<50	<50					
Gravimetric Heavy Hydrocarbons	µg/g	3300	NA	NA					
Moisture Content	%	0.1	5.7	5.0					
Surrogate	Unit	Acceptable Limits							
Terphenyl	%	60-140	73	63					

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O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)

DATE RECEIVED: 2013-02-11

DATE REPORTED: 2013-02-19

Comments: RDL - Reported Detection Limit: G / S - Guideline / Standard: Refers to T2(CC) - Current
4126824-4127344 Results are based on sample dry weight.

The C6-C10 fraction is calculated using toluene response factor.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.

Total C6 - C50 results are corrected for BTEX and PAH contributions.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

nC6 and nC10 response factors are within 30% of Toluene response factor.

nC10, nC16 and nC34 response factors are within 10% of their average.

C50 response factor is within 70% of nC10 + nC16 + nC34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

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O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S1	S2	S3	S4	S5	S6	S7	S8
		DATE SAMPLED:	G/S								
Dichlorodifluoromethane	ug/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Geoff

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S1	S2	S3	S4	S5	S6	S7	S8
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:	RDL	27/2013	27/2013	27/2013	27/2013	27/2013	27/2013	27/2013	27/2013
G / S				4126824	4126825	4126829	4126833	4126837	4126841	4126845	4126849
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	ug/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	ug/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		108	108	106	107	105	106	107	105
4-Bromofluorobenzene	% Recovery	50-140		101	99	101	99	100	99	106	100

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AGAT WORK ORDER: 13T687573

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)													
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19									
Parameter	Unit	SAMPLE DESCRIPTION:			S9	S10	S11	S12	S13	S14	S15	S16	
		DATE SAMPLED:	G/S	RDL									
Dichlorodifluoromethane	ug/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126881
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	27/2013 4126877
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	27/2013 4126877
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	27/2013 4126877
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	27/2013 4126877
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	27/2013 4126877
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	27/2013 4126877
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	27/2013 4126877
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	27/2013 4126877
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	27/2013 4126877
Trichloroethylene	ug/g	0.55	0.03	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	27/2013 4126877
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	27/2013 4126877
Toluene	ug/g	6.4	0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	27/2013 4126877
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	27/2013 4126877
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
m & p-Xylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	27/2013 4126877

Geoff White

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S9 Soil 27/2013 4126853	S10 Soil 27/2013 4126857	S11 Soil 27/2013 4126861	S12 Soil 27/2013 4126865	S13 Soil 27/2013 4126869	S14 Soil 27/2013 4126873	S15 Soil 27/2013 4126877	S16 Soil 27/2013 4126881
		DATE SAMPLED:	RDL								
		G / S									
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	µg/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
		50-140		106	106	105	107	107	106	105	106
Toluene-d8	% Recovery	50-140		92	91	87	89	88	87	90	89
4-Bromofluorobenzene	% Recovery	50-140									

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)										DATE REPORTED: 2013-02-19			
Parameter	Unit	SAMPLE DESCRIPTION:		S17	S18	S19	S20	S21	S22	S23	S24		
		G/S	RDL										
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Geoff

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

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CLIENT NAME: PETO MACCALLUM

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O. Reg. 153(511) - VOCs (Soil)												
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19								
Parameter	Unit	SAMPLE DESCRIPTION:			S25	S26	S27	S28	S29	S30	S31	S32
		SAMPLE TYPE:		DATE SAMPLED:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		G / S	RDL	2/7/2013	4126923	4126928	4126932	4126938	4126943	4126948	4126954	4126958
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Geoff

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S25	S26	S27	S28	S29	S30	S31	S32
		DATE SAMPLED:	G / S	RDL	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	µg/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		103	104	106	101	102	105	103	99
4-Bromofluorobenzene	% Recovery	50-140		89	90	89	89	90	91	92	90

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S33 Soil 2/7/2013 4126962	S34 Soil 2/7/2013 4126966	S35 Soil 2/7/2013 4126970	S36 Soil 2/7/2013 4126974	S37 Soil 2/7/2013 4126978	S38 Soil 2/7/2013 4126982	S39 Soil 2/7/2013 4126986	S40 Soil 2/7/2013 4126991
		G/S	RDL								
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Geoff

Certified By:



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S33	S34	S35	S36	S37	S38	S39	S40
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:	RDL	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013
	G / S										
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	ug/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	ug/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		102	101	102	102	103	102	104	107
4-Bromofluorobenzene	% Recovery	50-140		89	88	89	90	90	93	92	99

Certified By:

AGAT CERTIFICATE OF ANALYSIS (V1)

Results relate only to the items tested and to all the items tested



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)										DATE REPORTED: 2013-02-19			
Parameter	Unit	SAMPLE DESCRIPTION:		S41 Soil	S42 Soil	S43 Soil	S44 Soil	S45 Soil	S46 Soil	S47 Soil	S48 Soil		
		G/S	RDL										
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	0.39	<0.05	<0.05	<0.05	<0.05	0.49	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	0.10	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	0.22	0.07	<0.05	<0.05	<0.05	0.34	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Geoff

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S41 Soil 2/7/2013 4127002	S42 Soil 2/7/2013 4127006	S43 Soil 2/7/2013 4127010	S44 Soil 2/7/2013 4127014	S45 Soil 2/7/2013 4127018	S46 Soil 2/7/2013 4127022	S47 Soil 2/7/2013 4127026	S48 Soil 2/7/2013 4127304
		SAMPLE TYPE:									
		DATE SAMPLED:	RDL								
	G / S										
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	0.20	0.12	<0.05	<0.05	<0.05	0.32	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	0.42	0.19	<0.05	<0.05	<0.05	0.66	<0.05
1,3-Dichloropropene	µg/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		108	108	106	108	106	107	112	91
4-Bromofluorobenzene	% Recovery	50-140		98	101	100	101	100	99	109	114

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White



CLIENT NAME: PETO MACCALLUM

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2013-02-11

DATE REPORTED: 2013-02-19

Parameter	Unit	SAMPLE DESCRIPTION:		S49	S50	S51	S52	S53	S54	S55	S56
		G/S	RDL	DATE SAMPLED:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Dichlorodifluoromethane	µg/g	16	0.05	2/7/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	4/12/2013	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	4/12/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans-1,2-Dichloroethylene	ug/g	1.3	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	4/12/2013	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	4/12/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis-1,2-Dichloroethylene	ug/g	1.9	0.02	4/12/2013	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	4/12/2013	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	4/12/2013	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	4/12/2013	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	4/12/2013	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	4/12/2013	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	4/12/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	4/12/2013	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	4/12/2013	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	4/12/2013	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g	0.05	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	4/12/2013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)											
DATE RECEIVED: 2013-02-11				DATE REPORTED: 2013-02-19							
Parameter	Unit	SAMPLE DESCRIPTION:		S49	S50	S51	S52	S53	S54	S55	S56
		SAMPLE TYPE:									
		DATE SAMPLED:		2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013	2/7/2013
		G / S	RDL								
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	µg/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		94	96	99	97	100	95	100	99
4-Bromofluorobenzene	% Recovery	50-140		113	104	105	111	118	120	120	114

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AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)						DATE REPORTED: 2013-02-19	
DATE RECEIVED: 2013-02-11		SAMPLE DESCRIPTION:				SS8	
Parameter	Unit	SAMPLE TYPE:		SS7		Soil	
		DATE SAMPLED:	RDL	DATE SAMPLED:	SS7	DATE SAMPLED:	SS8
Dichlorodifluoromethane	µg/g	16	0.05	2/7/2013	4127340	2/7/2013	4127344
Vinyl Chloride	ug/g	0.032	0.02	<0.05	<0.05	<0.05	<0.05
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.067	0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05

Certified By: _____

Geoff White



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Certificate of Analysis

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)									
DATE RECEIVED: 2013-02-11					DATE REPORTED: 2013-02-19				
Parameter	Unit	SAMPLE DESCRIPTION:				S57	S58	27/2013	4127344
		DATE SAMPLED:	SAMPLE TYPE:		Soil	Soil			
		G / S	RDL						
Styrene	ug/g	34	0.05		<0.05		<0.05		
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05		<0.05		
o-Xylene	ug/g		0.05		<0.05		<0.05		
1,3-Dichlorobenzene	ug/g	9.6	0.05		<0.05		<0.05		
1,4-Dichlorobenzene	ug/g	0.2	0.05		<0.05		<0.05		
1,2-Dichlorobenzene	ug/g	1.2	0.05		<0.05		<0.05		
Xylene Mixture	ug/g	26	0.05		<0.05		<0.05		
1,3-Dichloropropene	ug/g	0.059	0.04		<0.05		<0.04		
n-Hexane	ug/g	46	0.05		<0.05		<0.05		
Surrogate	Unit	Acceptable Limits							
Toluene-d8	% Recovery	50-140				98		107	
4-Bromofluorobenzene	% Recovery	50-140				107		116	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(CC) - Current

4126824-4127336 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

4127340 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

4127344 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

Certified By:



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Soil Analysis															
RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	4126824	< 0.8	< 0.8	0.0%	< 0.8	97%	70%	130%	99%	80%	120%	95%	70%	130%
Arsenic	1	4126824	< 1	< 1	0.0%	< 1	110%	70%	130%	103%	80%	120%	105%	70%	130%
Barium	1	4126824	21	21	0.0%	< 2	99%	70%	130%	103%	80%	120%	100%	70%	130%
Beryllium	1	4126824	< 0.5	< 0.5	0.0%	< 0.5	104%	70%	130%	108%	80%	120%	108%	70%	130%
Boron	1	4126824	< 5	< 5	0.0%	< 5	70%	70%	130%	111%	80%	120%	108%	70%	130%
Boron (Hot Water Soluble)	1	4126824	< 0.10	< 0.10	0.0%	< 0.10	124%	60%	140%	102%	70%	130%	107%	60%	140%
Cadmium	1	4126824	< 0.5	< 0.5	0.0%	< 0.5	96%	70%	130%	117%	80%	120%	107%	70%	130%
Chromium	1	4126824	6	6	0.0%	< 2	94%	70%	130%	102%	80%	120%	104%	70%	130%
Cobalt	1	4126824	2.2	2.3	4.4%	< 0.5	98%	70%	130%	99%	80%	120%	96%	70%	130%
Copper	1	4126824	5	6	18.2%	< 1	104%	70%	130%	102%	80%	120%	98%	70%	130%
Lead	1	4126824	2	2	0.0%	< 1	105%	70%	130%	105%	80%	120%	103%	70%	130%
Molybdenum	1	4126824	< 0.5	< 0.5	0.0%	< 0.5	106%	70%	130%	101%	80%	120%	105%	70%	130%
Nickel	1	4126824	4	4	0.0%	< 1	98%	70%	130%	102%	80%	120%	98%	70%	130%
Selenium	1	4126824	< 0.4	< 0.4	0.0%	< 0.4	110%	70%	130%	98%	80%	120%	102%	70%	130%
Silver	1	4126824	< 0.2	< 0.2	0.0%	< 0.2	72%	70%	130%	105%	80%	120%	105%	70%	130%
Thallium	1	4126824	< 0.4	< 0.4	0.0%	< 0.4	91%	70%	130%	102%	80%	120%	101%	70%	130%
Uranium	1	4126824	< 0.5	< 0.5	0.0%	< 0.5	101%	70%	130%	105%	80%	120%	107%	70%	130%
Vanadium	1	4126824	11	11	0.0%	< 1	101%	70%	130%	95%	80%	120%	101%	70%	130%
Zinc	1	4126824	13	13	0.0%	< 5	104%	70%	130%	106%	80%	120%	107%	70%	130%
Chromium VI	1	4126824	< 0.2	< 0.2	0.0%	< 0.2	95%	70%	130%	99%	80%	120%	98%	70%	130%
Cyanide	1	4126824	< 0.040	< 0.040	0.0%	< 0.040	99%	70%	130%	110%	80%	120%	101%	70%	130%
Mercury	1	4126824	< 0.10	< 0.10	0.0%	< 0.10		70%	130%	104%	80%	120%	104%	70%	130%
Electrical Conductivity (2:1)	1	4126824	0.086	0.088	2.3%	< 0.005	95%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	4126824	0.147	0.150	1.8%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1	4126824	7.95	7.87	1.0%	NA	99%	90%	110%	NA			NA		
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	4126861	< 0.8	< 0.8	0.0%	< 0.8	81%	70%	130%	97%	80%	120%	102%	70%	130%
Arsenic	1	4126861	1	1	0.0%	< 1	115%	70%	130%	101%	80%	120%	100%	70%	130%
Barium	1	4126861	18	17	5.7%	< 2	105%	70%	130%	100%	80%	120%	99%	70%	130%
Beryllium	1	4126861	< 0.5	< 0.5	0.0%	< 0.5	91%	70%	130%	108%	80%	120%	97%	70%	130%
Boron	1	4126861	< 5	< 5	0.0%	< 5	85%	70%	130%	111%	80%	120%	101%	70%	130%
Boron (Hot Water Soluble)	1	4126903	< 0.10	< 0.10	0.0%	< 0.10	120%	60%	140%	101%	70%	130%	106%	60%	140%
Cadmium	1	4126861	< 0.5	< 0.5	0.0%	< 0.5	100%	70%	130%	114%	80%	120%	105%	70%	130%
Chromium	1	4126861	5	5	0.0%	< 2	102%	70%	130%	101%	80%	120%	97%	70%	130%
Cobalt	1	4126861	2.0	1.9	5.1%	< 0.5	96%	70%	130%	99%	80%	120%	95%	70%	130%
Copper	1	4126861	4	5	22.2%	< 1	97%	70%	130%	103%	80%	120%	97%	70%	130%
Lead	1	4126861	2	2	0.0%	< 1	107%	70%	130%	104%	80%	120%	98%	70%	130%
Molybdenum	1	4126861	< 0.5	< 0.5	0.0%	< 0.5	102%	70%	130%	100%	80%	120%	105%	70%	130%
Nickel	1	4126861	4	5	22.2%	< 1	101%	70%	130%	104%	80%	120%	95%	70%	130%

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Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Soil Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Selenium	1	4126861	< 0.4	< 0.4	0.0%	< 0.4	95%	70%	130%	96%	80%	120%	97%	70%	130%
Silver	1	4126861	< 0.2	< 0.2	0.0%	< 0.2	75%	70%	130%	102%	80%	120%	105%	70%	130%
Thallium	1	4126861	< 0.4	< 0.4	0.0%	< 0.4	101%	70%	130%	102%	80%	120%	94%	70%	130%
Uranium	1	4126861	< 0.5	< 0.5	0.0%	< 0.5	108%	70%	130%	102%	80%	120%	98%	70%	130%
Vanadium	1	4126861	12	11	8.7%	< 1	99%	70%	130%	94%	80%	120%	97%	70%	130%
Zinc	1	4126861	12	12	0.0%	< 5	105%	70%	130%	115%	80%	120%	109%	70%	130%
Chromium VI	1	4126861	< 0.2	< 0.2	0.0%	< 0.2	95%	70%	130%	95%	80%	120%	100%	70%	130%
Cyanide	1	4126903	< 0.040	< 0.040	0.0%	< 0.040	98%	70%	130%	95%	80%	120%	88%	70%	130%
Mercury	1	4126861	< 0.10	< 0.10	0.0%	< 0.10	115%	70%	130%	110%	80%	120%	103%	70%	130%
Electrical Conductivity (2:1)	1	4126857	0.131	0.130	0.8%	< 0.005	95%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	4126857	1.73	1.63	6.0%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1	4126853	7.87	7.90	0.4%	NA	101%	90%	110%	NA			NA		
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	4126893	< 0.8	< 0.8	0.0%	< 0.8	101%	70%	130%	102%	80%	120%	102%	70%	130%
Arsenic	1	4126893	< 1	< 1	0.0%	< 1	106%	70%	130%	97%	80%	120%	102%	70%	130%
Barium	1	4126893	20	19	5.1%	< 2	102%	70%	130%	100%	80%	120%	98%	70%	130%
Beryllium	1	4126893	< 0.5	< 0.5	0.0%	< 0.5	90%	70%	130%	107%	80%	120%	104%	70%	130%
Boron	1	4126893	< 5	< 5	0.0%	< 5	78%	70%	130%	104%	80%	120%	106%	70%	130%
Boron (Hot Water Soluble)	1	4126948	< 0.10	< 0.10	0.0%	< 0.10	118%	60%	140%	106%	70%	130%	109%	60%	140%
Cadmium	1	4126893	< 0.5	< 0.5	0.0%	< 0.5	103%	70%	130%	117%	80%	120%	120%	70%	130%
Chromium	1	4126893	6	6	0.0%	< 2	99%	70%	130%	96%	80%	120%	98%	70%	130%
Cobalt	1	4126893	2.0	2.0	0.0%	< 0.5	104%	70%	130%	94%	80%	120%	94%	70%	130%
Copper	1	4126893	7	6	15.4%	< 1	102%	70%	130%	98%	80%	120%	96%	70%	130%
Lead	1	4126893	5	5	0.0%	< 1	105%	70%	130%	101%	80%	120%	96%	70%	130%
Molybdenum	1	4126893	< 0.5	< 0.5	0.0%	< 0.5	105%	70%	130%	99%	80%	120%	102%	70%	130%
Nickel	1	4126893	6	3	NA	< 1	96%	70%	130%	91%	80%	120%	85%	70%	130%
Selenium	1	4126893	< 0.4	< 0.4	0.0%	< 0.4	99%	70%	130%	94%	80%	120%	95%	70%	130%
Silver	1	4126893	< 0.2	< 0.2	0.0%	< 0.2	75%	70%	130%	97%	80%	120%	102%	70%	130%
Thallium	1	4126893	< 0.4	< 0.4	0.0%	< 0.4	97%	70%	130%	98%	80%	120%	94%	70%	130%
Uranium	1	4126893	< 0.5	< 0.5	0.0%	< 0.5	104%	70%	130%	101%	80%	120%	97%	70%	130%
Vanadium	1	4126893	13	13	0.0%	< 1	103%	70%	130%	95%	80%	120%	94%	70%	130%
Zinc	1	4126893	25	25	0.0%	< 5	102%	70%	130%	110%	80%	120%	99%	70%	130%
Chromium VI	1	4126903	< 0.2	< 0.2	0.0%	< 0.2	95%	70%	130%	96%	80%	120%	98%	70%	130%
Cyanide	1	4127002	< 0.040	< 0.040	0.0%	< 0.040	93%	70%	130%	94%	80%	120%	101%	70%	130%
Mercury	1	4126893	< 0.10	< 0.10	0.0%	< 0.10	126%	70%	130%	106%	80%	120%	103%	70%	130%
Electrical Conductivity (2:1)	1	4126903	0.102	0.103	1.0%	< 0.005	98%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	4126903	0.379	0.383	1.0%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1	4126893	7.82	7.78	0.5%	NA	99%	90%	110%	NA			NA		

Comments: NA signifies Not Applicable.

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AGAT Laboratories

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Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Soil Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By:

AGAT QUALITY ASSURANCE REPORT (V1)

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Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	96%	50%	140%	87%	50%	140%	85%	50%	140%
Vinyl Chloride	1	4126857	< 0.02	< 0.02	0.0%	< 0.02	109%	50%	140%	95%	50%	140%	89%	50%	140%
Bromomethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	106%	50%	140%	93%	50%	140%	82%	50%	140%
Trichlorofluoromethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	85%	50%	140%	86%	50%	140%	90%	50%	140%
Acetone	1	4126857	< 0.50	< 0.50	0.0%	< 0.50	96%	50%	140%	94%	50%	140%	112%	50%	140%
1,1-Dichloroethylene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	86%	60%	130%	85%	50%	140%
Methylene Chloride	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	106%	50%	140%	101%	60%	130%	93%	50%	140%
Trans- 1,2-Dichloroethylene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	93%	60%	130%	97%	50%	140%
Methyl tert-butyl Ether	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	86%	60%	130%	85%	50%	140%
1,1-Dichloroethane	1	4126857	< 0.02	< 0.02	0.0%	< 0.02	104%	50%	140%	99%	60%	130%	95%	50%	140%
Methyl Ethyl Ketone	1	4126857	< 0.50	< 0.50	0.0%	< 0.50	70%	50%	140%	84%	50%	140%	93%	50%	140%
Cis- 1,2-Dichloroethylene	1	4126857	< 0.02	< 0.02	0.0%	< 0.02	99%	50%	140%	97%	60%	130%	93%	50%	140%
Chloroform	1	4126857	< 0.04	< 0.04	0.0%	< 0.04	101%	50%	140%	96%	60%	130%	94%	50%	140%
1,2-Dichloroethane	1	4126857	< 0.03	< 0.03	0.0%	< 0.03	97%	50%	140%	104%	60%	130%	96%	50%	140%
1,1,1-Trichloroethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	91%	50%	140%	88%	60%	130%	88%	50%	140%
Carbon Tetrachloride	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	77%	50%	140%	76%	60%	130%	79%	50%	140%
Benzene	1	4126857	< 0.02	< 0.02	0.0%	< 0.02	95%	50%	140%	93%	60%	130%	90%	50%	140%
1,2-Dichloropropane	1	4126857	< 0.03	< 0.03	0.0%	< 0.03	94%	50%	140%	97%	60%	130%	95%	50%	140%
Trichloroethylene	1	4126857	< 0.03	< 0.03	0.0%	< 0.03	88%	50%	140%	88%	60%	130%	87%	50%	140%
Bromodichloromethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	93%	60%	130%	92%	50%	140%
Methyl Isobutyl Ketone	1	4126857	< 0.50	< 0.50	0.0%	< 0.50	99%	50%	140%	104%	50%	140%	110%	50%	140%
1,1,2-Trichloroethane	1	4126857	< 0.04	< 0.04	0.0%	< 0.04	119%	50%	140%	115%	60%	130%	116%	50%	140%
Toluene	1	4126857	0.12	0.12	0.0%	< 0.05	112%	50%	140%	118%	60%	130%	111%	50%	140%
Dibromochloromethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	111%	60%	130%	104%	50%	140%
Ethylene Dibromide	1	4126857	< 0.04	< 0.04	0.0%	< 0.04	110%	50%	140%	115%	60%	130%	112%	50%	140%
Tetrachloroethylene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	110%	60%	130%	107%	50%	140%
1,1,1,2-Tetrachloroethane	1	4126857	< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	114%	60%	130%	112%	50%	140%
Chlorobenzene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	115%	60%	130%	111%	50%	140%
Ethylbenzene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	109%	60%	130%	104%	50%	140%
m & p-Xylene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	109%	60%	130%	104%	50%	140%
Bromoform	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	109%	60%	130%	102%	50%	140%
Styrene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	98%	60%	130%	93%	50%	140%
1,1,2,2-Tetrachloroethane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	105%	60%	130%	104%	50%	140%
o-Xylene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	106%	50%	140%	110%	60%	130%	105%	50%	140%
1,3-Dichlorobenzene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	105%	60%	130%	100%	50%	140%
1,4-Dichlorobenzene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	104%	60%	130%	104%	50%	140%
1,2-Dichlorobenzene	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	88%	50%	140%	95%	60%	130%	94%	50%	140%
Xylene Mixture	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	106%	50%	140%	110%	60%	130%	105%	50%	140%
1,3-Dichloropropene	1	4126857	< 0.04	< 0.04	0.0%	< 0.04	106%	50%	140%	106%	60%	130%	102%	50%	140%

Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1	4126857	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	110%	80%	130%	104%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)															
F1 (C6 to C10)	1	4126857	< 5	< 5	0.0%	< 5	103%	60%	140%	106%	80%	120%	105%	60%	140%
F2 (C10 to C16)	1	4126865	< 10	< 10	0.0%	< 10	105%	60%	140%	107%	80%	120%	102%	60%	140%
F3 (C16 to C34)	1	4126865	< 50	< 50	0.0%	< 50	105%	60%	140%	113%	80%	120%	94%	60%	140%
F4 (C34 to C50)	1	4126865	< 50	< 50	0.0%	< 50	94%	60%	140%	89%	80%	120%	87%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	80%	50%	140%	69%	50%	140%	70%	50%	140%
Acenaphthylene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	73%	50%	140%	82%	50%	140%
Acenaphthene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	81%	50%	140%	91%	50%	140%
Fluorene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	70%	50%	140%	78%	50%	140%
Phenanthrene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	96%	50%	140%	73%	50%	140%	76%	50%	140%
Anthracene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	76%	50%	140%	81%	50%	140%
Fluoranthene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	76%	50%	140%	83%	50%	140%
Pyrene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	80%	50%	140%	88%	50%	140%
Benz(a)anthracene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	66%	50%	140%	66%	50%	140%	77%	50%	140%
Chrysene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	122%	50%	140%	92%	50%	140%	100%	50%	140%
Benzo(b)fluoranthene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	77%	50%	140%	91%	50%	140%
Benzo(k)fluoranthene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	119%	50%	140%	106%	50%	140%	95%	50%	140%
Benzo(a)pyrene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	67%	50%	140%	71%	50%	140%
Indeno(1,2,3-cd)pyrene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	84%	50%	140%	64%	50%	140%	75%	50%	140%
Dibenz(a,h)anthracene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	72%	50%	140%	77%	50%	140%
Benzo(g,h,i)perylene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	84%	50%	140%	99%	50%	140%
2-and 1-methyl Naphthalene	1	4126824	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	69%	50%	140%	76%	50%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	74%	50%	140%	70%	50%	140%
Vinyl Chloride	1	4127340	< 0.02	< 0.02	0.0%	< 0.02	114%	50%	140%	90%	50%	140%	90%	50%	140%
Bromomethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	98%	50%	140%	102%	50%	140%
Trichlorofluoromethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	113%	50%	140%	106%	50%	140%
Acetone	1	4127340	< 0.50	< 0.50	0.0%	< 0.50	100%	50%	140%	108%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	119%	50%	140%	112%	60%	130%	105%	50%	140%
Methylene Chloride	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	126%	60%	130%	93%	50%	140%
Trans- 1,2-Dichloroethylene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	103%	60%	130%	103%	50%	140%
Methyl tert-butyl Ether	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	83%	50%	140%	85%	60%	130%	91%	50%	140%
1,1-Dichloroethane	1	4127340	< 0.02	< 0.02	0.0%	< 0.02	114%	50%	140%	110%	60%	130%	106%	50%	140%
Methyl Ethyl Ketone	1	4127340	< 0.50	< 0.50	0.0%	< 0.50	75%	50%	140%	101%	50%	140%	86%	50%	140%
Cis- 1,2-Dichloroethylene	1	4127340	< 0.02	< 0.02	0.0%	< 0.02	93%	50%	140%	101%	60%	130%	90%	50%	140%
Chloroform	1	4127340	< 0.04	< 0.04	0.0%	< 0.04	121%	50%	140%	118%	60%	130%	111%	50%	140%
1,2-Dichloroethane	1	4127340	< 0.03	< 0.03	0.0%	< 0.03	108%	50%	140%	112%	60%	130%	107%	50%	140%

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AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.

Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,1,1-Trichloroethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	116%	60%	130%	104%	50%	140%
Carbon Tetrachloride	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	114%	60%	130%	102%	50%	140%
Benzene	1	4127340	< 0.02	< 0.02	0.0%	< 0.02	96%	50%	140%	105%	60%	130%	94%	50%	140%
1,2-Dichloropropane	1	4127340	< 0.03	< 0.03	0.0%	< 0.03	98%	50%	140%	108%	60%	130%	97%	50%	140%
Trichloroethylene	1	4127340	< 0.03	< 0.03	0.0%	< 0.03	109%	50%	140%	97%	60%	130%	87%	50%	140%
Bromodichloromethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	114%	50%	140%	114%	60%	130%	109%	50%	140%
Methyl Isobutyl Ketone	1	4127340	< 0.50	< 0.50	0.0%	< 0.50	53%	50%	140%	103%	50%	140%	86%	50%	140%
1,1,2-Trichloroethane	1	4127340	< 0.04	< 0.04	0.0%	< 0.04	114%	50%	140%	121%	60%	130%	111%	50%	140%
Toluene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	113%	60%	130%	93%	50%	140%
Dibromochloromethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	121%	60%	130%	108%	50%	140%
Ethylene Dibromide	1	4127340	< 0.04	< 0.04	0.0%	< 0.04	103%	50%	140%	113%	60%	130%	98%	50%	140%
Tetrachloroethylene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	124%	60%	130%	106%	50%	140%
1,1,1,2-Tetrachloroethane	1	4127340	< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	118%	60%	130%	107%	50%	140%
Chlorobenzene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	119%	60%	130%	107%	50%	140%
Ethylbenzene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	88%	50%	140%	106%	60%	130%	91%	50%	140%
m & p-Xylene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	114%	60%	130%	99%	50%	140%
Bromoform	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	122%	60%	130%	111%	50%	140%
Styrene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	83%	50%	140%	101%	60%	130%	89%	50%	140%
1,1,2,2-Tetrachloroethane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	117%	60%	130%	128%	50%	140%
o-Xylene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	80%	50%	140%	88%	60%	130%	78%	50%	140%
1,3-Dichlorobenzene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	113%	60%	130%	104%	50%	140%
1,4-Dichlorobenzene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	119%	60%	130%	110%	50%	140%
1,2-Dichlorobenzene	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	115%	60%	130%	107%	50%	140%
Xylene Mixture	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	101%	60%	130%	89%	50%	140%
1,3-Dichloropropene	1	4127340	< 0.04	< 0.04	0.0%	< 0.04	95%	50%	140%	112%	60%	130%	98%	50%	140%
n-Hexane	1	4127340	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	111%	60%	130%	103%	50%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	73%	50%	140%	77%	50%	140%	82%	50%	140%
Vinyl Chloride	1	4126948	< 0.02	< 0.02	0.0%	< 0.02	100%	50%	140%	104%	50%	140%	70%	50%	140%
Bromomethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	106%	50%	140%	103%	50%	140%	103%	50%	140%
Trichlorofluoromethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	113%	50%	140%	97%	50%	140%
Acetone	1	4126948	< 0.50	< 0.50	0.0%	< 0.50	112%	50%	140%	106%	50%	140%	113%	50%	140%
1,1-Dichloroethylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	106%	60%	130%	99%	50%	140%
Methylene Chloride	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	113%	60%	130%	117%	50%	140%
Trans- 1,2-Dichloroethylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	91%	50%	140%	102%	60%	130%	101%	50%	140%
Methyl tert-butyl Ether	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	77%	60%	130%	80%	50%	140%
1,1-Dichloroethane	1	4126948	< 0.02	< 0.02	0.0%	< 0.02	104%	50%	140%	103%	60%	130%	101%	50%	140%
Methyl Ethyl Ketone	1	4126948	< 0.50	< 0.50	0.0%	< 0.50	105%	50%	140%	106%	50%	140%	95%	50%	140%
Cis- 1,2-Dichloroethylene	1	4126948	< 0.02	< 0.02	0.0%	< 0.02	100%	50%	140%	104%	60%	130%	95%	50%	140%



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Chloroform	1	4126948	< 0.04	< 0.04	0.0%	< 0.04	102%	50%	140%	106%	60%	130%	105%	50%	140%
1,2-Dichloroethane	1	4126948	< 0.03	< 0.03	0.0%	< 0.03	106%	50%	140%	110%	60%	130%	110%	50%	140%
1,1,1-Trichloroethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	83%	50%	140%	94%	60%	130%	92%	50%	140%
Carbon Tetrachloride	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	84%	50%	140%	98%	60%	130%	93%	50%	140%
Benzene	1	4126948	< 0.02	< 0.02	0.0%	< 0.02	100%	50%	140%	106%	60%	130%	106%	50%	140%
1,2-Dichloropropane	1	4126948	< 0.03	< 0.03	0.0%	< 0.03	100%	50%	140%	104%	60%	130%	106%	50%	140%
Trichloroethylene	1	4126948	< 0.03	< 0.03	0.0%	< 0.03	100%	50%	140%	111%	60%	130%	111%	50%	140%
Bromodichloromethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	108%	60%	130%	107%	50%	140%
Methyl Isobutyl Ketone	1	4126948	< 0.50	< 0.50	0.0%	< 0.50	111%	50%	140%	111%	50%	140%	113%	50%	140%
1,1,2-Trichloroethane	1	4126948	< 0.04	< 0.04	0.0%	< 0.04	121%	50%	140%	119%	60%	130%	109%	50%	140%
Toluene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	117%	60%	130%	106%	50%	140%
Dibromochloromethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	111%	60%	130%	105%	50%	140%
Ethylene Dibromide	1	4126948	< 0.04	< 0.04	0.0%	< 0.04	107%	50%	140%	118%	60%	130%	109%	50%	140%
Tetrachloroethylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	110%	60%	130%	97%	50%	140%
1,1,1,2-Tetrachloroethane	1	4126948	< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	108%	60%	130%	96%	50%	140%
Chlorobenzene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	116%	60%	130%	106%	50%	140%
Ethylbenzene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	102%	60%	130%	91%	50%	140%
m & p-Xylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	111%	60%	130%	99%	50%	140%
Bromoform	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	105%	60%	130%	96%	50%	140%
Styrene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	104%	60%	130%	95%	50%	140%
1,1,2,2-Tetrachloroethane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	111%	60%	130%	104%	50%	140%
o-Xylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	116%	60%	130%	104%	50%	140%
1,3-Dichlorobenzene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	112%	60%	130%	102%	50%	140%
1,4-Dichlorobenzene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	115%	60%	130%	110%	50%	140%
1,2-Dichlorobenzene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	111%	60%	130%	99%	50%	140%
Xylene Mixture	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	114%	60%	130%	102%	50%	140%
1,3-Dichloropropene	1	4126948	< 0.04	< 0.04	0.0%	< 0.04	101%	50%	140%	91%	60%	130%	89%	50%	140%
n-Hexane	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	102%	60%	130%	70%	50%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	103%	50%	140%	99%	50%	140%
Vinyl Chloride	1	4126897	< 0.02	< 0.02	0.0%	< 0.02	124%	50%	140%	122%	50%	140%	116%	50%	140%
Bromomethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	81%	50%	140%	105%	50%	140%
Trichlorofluoromethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	124%	50%	140%	122%	50%	140%	118%	50%	140%
Acetone	1	4126897	< 0.50	< 0.50	0.0%	< 0.50	122%	50%	140%	103%	50%	140%	106%	50%	140%
1,1-Dichloroethylene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	120%	50%	140%	112%	60%	130%	106%	50%	140%
Methylene Chloride	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	112%	60%	130%	112%	50%	140%
Trans- 1,2-Dichloroethylene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	89%	50%	140%	110%	60%	130%	119%	50%	140%
Methyl tert-butyl Ether	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	118%	60%	130%	107%	50%	140%
1,1-Dichloroethane	1	4126897	< 0.02	< 0.02	0.0%	< 0.02	113%	50%	140%	116%	60%	130%	106%	50%	140%



Quality Assurance

CLIENT NAME: PETO MACCALLUM

PROJECT NO: 13BX001

AGAT WORK ORDER: 13T687573

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Methyl Ethyl Ketone	1	4126897	< 0.50	< 0.50	0.0%	< 0.50	112%	50%	140%	100%	50%	140%	103%	50%	140%
Cis- 1,2-Dichloroethylene	1	4126897	< 0.02	< 0.02	0.0%	< 0.02	109%	50%	140%	107%	60%	130%	106%	50%	140%
Chloroform	1	4126897	< 0.04	< 0.04	0.0%	< 0.04	109%	50%	140%	107%	60%	130%	105%	50%	140%
1,2-Dichloroethane	1	4126897	< 0.03	< 0.03	0.0%	< 0.03	105%	50%	140%	107%	60%	130%	105%	50%	140%
1,1,1-Trichloroethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	116%	60%	130%	114%	50%	140%
Carbon Tetrachloride	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	105%	60%	130%	106%	50%	140%
Benzene	1	4126897	< 0.02	< 0.02	0.0%	< 0.02	120%	50%	140%	118%	60%	130%	115%	50%	140%
1,2-Dichloropropane	1	4126897	< 0.03	< 0.03	0.0%	< 0.03	111%	50%	140%	111%	60%	130%	109%	50%	140%
Trichloroethylene	1	4126897	< 0.03	< 0.03	0.0%	< 0.03	118%	50%	140%	115%	60%	130%	118%	50%	140%
Bromodichloromethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	99%	60%	130%	98%	50%	140%
Methyl Isobutyl Ketone	1	4126897	< 0.50	< 0.50	0.0%	< 0.50	88%	50%	140%	102%	50%	140%	103%	50%	140%
1,1,2-Trichloroethane	1	4126897	< 0.04	< 0.04	0.0%	< 0.04	113%	50%	140%	108%	60%	130%	108%	50%	140%
Toluene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	111%	60%	130%	111%	50%	140%
Dibromochloromethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	92%	60%	130%	92%	50%	140%
Ethylene Dibromide	1	4126897	< 0.04	< 0.04	0.0%	< 0.04	106%	50%	140%	106%	60%	130%	106%	50%	140%
Tetrachloroethylene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	109%	60%	130%	116%	50%	140%
1,1,1,2-Tetrachloroethane	1	4126897	< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	100%	60%	130%	98%	50%	140%
Chlorobenzene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	115%	60%	130%	111%	50%	140%
Ethylbenzene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	111%	60%	130%	106%	50%	140%
m & p-Xylene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	123%	50%	140%	118%	60%	130%	112%	50%	140%
Bromoform	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	79%	50%	140%	77%	60%	130%	81%	50%	140%
Styrene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	109%	60%	130%	103%	50%	140%
1,1,2,2-Tetrachloroethane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	89%	50%	140%	82%	60%	130%	81%	50%	140%
o-Xylene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	117%	60%	130%	113%	50%	140%
1,3-Dichlorobenzene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	109%	60%	130%	107%	50%	140%
1,4-Dichlorobenzene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	118%	50%	140%	114%	60%	130%	111%	50%	140%
1,2-Dichlorobenzene	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	108%	60%	130%	104%	50%	140%
Xylene Mixture	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	118%	50%	140%	118%	60%	130%	113%	50%	140%
1,3-Dichloropropene	1	4126897	< 0.04	< 0.04	0.0%	< 0.04	93%	50%	140%	88%	60%	130%	86%	50%	140%
n-Hexane	1	4126897	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	112%	60%	130%	100%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)															
F1 (C6 to C10)	1	4126948	< 5	< 5	0.0%	< 5	88%	60%	140%	98%	80%	120%	99%	60%	140%
F2 (C10 to C16)	1	4126918	< 10	< 10	0.0%	< 10	105%	60%	140%	120%	80%	120%	108%	60%	140%
F3 (C16 to C34)	1	4126918	< 50	< 50	0.0%	< 50	106%	60%	140%	109%	80%	120%	104%	60%	140%
F4 (C34 to C50)	1	4126918	< 50	< 50	0.0%	< 50	99%	60%	140%	83%	80%	120%	110%	60%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)															
F1 (C6 to C10)	1	4127316	< 5	< 5	0.0%	< 5	98%	60%	140%	81%	80%	120%	83%	60%	140%
F2 (C10 to C16)	1	4126991	< 10	< 10	0.0%	< 10	101%	60%	140%	83%	80%	120%	114%	60%	140%
F3 (C16 to C34)	1	4126991	< 50	< 50	0.0%	< 50	112%	60%	140%	85%	80%	120%	127%	60%	140%
F4 (C34 to C50)	1	4126991	< 50	< 50	0.0%	< 50	89%	60%	140%	89%	80%	120%	127%	60%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

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AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.

Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)

F1 (C6 to C10)	1	4126897	< 5	< 5	0.0%	< 5	81%	60%	140%	83%	80%	120%	108%	60%	140%
F2 (C10 to C16)	1	4127328	< 10	< 10	0.0%	< 10	100%	60%	140%	112%	80%	120%	89%	60%	140%
F3 (C16 to C34)	1	4127328	< 50	< 50	0.0%	< 50	76%	60%	140%	119%	80%	120%	99%	60%	140%
F4 (C34 to C50)	1	4127328	< 50	< 50	0.0%	< 50	88%	60%	140%	106%	80%	120%	88%	60%	140%

O. Reg. 153(511) - PAHs (Soil)

Naphthalene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	69%	50%	140%	79%	50%	140%	75%	50%	140%
Acenaphthylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	86%	50%	140%	84%	50%	140%
Acenaphthene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	119%	50%	140%	100%	50%	140%	99%	50%	140%
Fluorene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	83%	50%	140%	93%	50%	140%
Phenanthrene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	82%	50%	140%	91%	50%	140%
Anthracene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	84%	50%	140%	92%	50%	140%
Fluoranthene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	80%	50%	140%	92%	50%	140%
Pyrene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	89%	50%	140%	83%	50%	140%	93%	50%	140%
Benz(a)anthracene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	71%	50%	140%	72%	50%	140%	100%	50%	140%
Chrysene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	90%	50%	140%	102%	50%	140%
Benzo(b)fluoranthene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	77%	50%	140%	96%	50%	140%
Benzo(k)fluoranthene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	114%	50%	140%	94%	50%	140%	96%	50%	140%
Benzo(a)pyrene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	71%	50%	140%	69%	50%	140%	86%	50%	140%
Indeno(1,2,3-cd)pyrene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	70%	50%	140%	79%	50%	140%	72%	50%	140%
Dibenz(a,h)anthracene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	79%	50%	140%	72%	50%	140%
Benzo(g,h,i)perylene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	73%	50%	140%	69%	50%	140%	92%	50%	140%
2-and 1-methyl Naphthalene	1	4126948	< 0.05	< 0.05	0.0%	< 0.05	85%	50%	140%	86%	50%	140%	81%	50%	140%

O. Reg. 153(511) - PAHs (Soil)

Naphthalene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	60%	50%	140%	72%	50%	140%	64%	50%	140%
Acenaphthylene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	82%	50%	140%	75%	50%	140%
Acenaphthene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	125%	50%	140%	102%	50%	140%	88%	50%	140%
Fluorene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	82%	50%	140%	83%	50%	140%
Phenanthrene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	120%	50%	140%	89%	50%	140%	84%	50%	140%
Anthracene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	81%	50%	140%	81%	50%	140%
Fluoranthene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	79%	50%	140%	70%	50%	140%	76%	50%	140%
Pyrene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	83%	50%	140%	75%	50%	140%	76%	50%	140%
Benz(a)anthracene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	66%	50%	140%	73%	50%	140%	72%	50%	140%
Chrysene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	67%	50%	140%	77%	50%	140%
Benzo(b)fluoranthene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	81%	50%	140%	103%	50%	140%
Benzo(k)fluoranthene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	125%	50%	140%	102%	50%	140%	85%	50%	140%
Benzo(a)pyrene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	81%	50%	140%	77%	50%	140%
Indeno(1,2,3-cd)pyrene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	88%	50%	140%	76%	50%	140%	72%	50%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

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Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 19, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Dibenz(a,h)anthracene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	88%	50%	140%	71%	50%	140%
Benzo(g,h,i)perylene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	82%	50%	140%	91%	50%	140%
2-and 1-methyl Naphthalene	1	4126958	< 0.05	< 0.05	0.0%	< 0.05	78%	50%	140%	78%	50%	140%	83%	50%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	61%	50%	140%	82%	50%	140%	67%	50%	140%
Acenaphthylene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	80%	50%	140%	95%	50%	140%	66%	50%	140%
Acenaphthene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	125%	50%	140%	84%	50%	140%
Fluorene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	105%	50%	140%	100%	50%	140%
Phenanthrene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	128%	50%	140%	112%	50%	140%	113%	50%	140%
Anthracene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	86%	50%	140%	75%	50%	140%
Fluoranthene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	80%	50%	140%	70%	50%	140%	69%	50%	140%
Pyrene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	74%	50%	140%	68%	50%	140%
Benz(a)anthracene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	76%	50%	140%	84%	50%	140%	76%	50%	140%
Chrysene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	85%	50%	140%	74%	50%	140%	68%	50%	140%
Benzo(b)fluoranthene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	79%	50%	140%	107%	50%	140%
Benzo(k)fluoranthene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	113%	50%	140%	111%	50%	140%
Benzo(a)pyrene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	78%	50%	140%	79%	50%	140%
Indeno(1,2,3-cd)pyrene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	91%	50%	140%	95%	50%	140%
Dibenz(a,h)anthracene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	90%	50%	140%	76%	50%	140%	100%	50%	140%
Benzo(g,h,i)perylene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	79%	50%	140%	97%	50%	140%
2-and 1-methyl Naphthalene	1	4127304	< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	90%	50%	140%	70%	50%	140%

Certified By: _____



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Arsenic	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Barium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	EPA SW 846 6010C; MSA, Part 3, Ch.21	ICP/OES
Cadmium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Copper	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Lead	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Nickel	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Selenium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Silver	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Thallium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Uranium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Zinc	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium VI	INOR-93-6029	SM 3500 B; MSA Part 3, Ch. 25	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE CN-3015 & E 3009 A; SM 4500 CN	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	McKeague 4.12, SM 2510 B	EC METER
Sodium Adsorption Ratio	INOR-93-6007	McKeague 4.12 & 3.26 & EPA SW-846 6010C	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	MSA part 3 & SM 4500-H+ B	PH METER



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluorene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Phenanthrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Chrysene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Moisture Content	Org 5506	EPA SW-846 3540 & 8270	BALANCE
Chrysene-d12	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
F1 (C6 to C10)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	CCME Tier 1 Method	GC / FID
F4 (C34 to C50)	VOL-91-5009	CCME Tier 1 Method	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	CCME Tier 1 Method	GRAVIMETRIC ANALYSIS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009		GC/FID
Dichlorodifluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Acetone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Benzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T687573

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl Isobutyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromoform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Styrene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



AGAT

Laboratories

5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
www.agatlabs.com • webeath.agatlabs.com

Chain of Custody Record

Client Information

Company: PETRO MAC CAMEL LTD
Contact: 19 CAMEL DRIVE
Address: BARBIE
Phone: 705-734-3900 Fax: 705-734-9911
Project: 13 BX 001 PO: 12-949
AGAT Quotation #: 12-949

Please note, if quotation number is not provided,
client will be billed full price for analysis.

Invoice To

Company: _____
Contact: _____
Address: _____

Legend Matrix

GW Ground Water ☐ Oil
SW Surface Water ☐ P Paint
SD Sediment ☐ S Soil

Report Information - reports to be sent to:

1. Name: GEORGE WHITE
Email: white@petromacellum.com
2. Name: BOUY CATSALAN
Email: dcatsal@petromacellum.com

Regulatory Requirements

☒ Regulation 153/04 (Ind. 512 Amend.)
Table 2 Indicate one
☒ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture (check one)
☐ Coarse ☐ Fine
☐ Sewer Use
Region Indicate one
☐ Sanitary
☐ Storm
☐ Regulation 558
☐ CCME
☐ Other (specify) _____
☐ Prov. Water Quality Objectives (PWQO)
☐ None

Is this a drinking water sample?

(potable water intended for human consumption)
☐ Yes ☒ No
If "Yes", please use the
Drinking Water Chain of Custody Form

Is this submission for a Record of Site Condition?

☐ Yes ☒ No

Laboratory Use Only

Arrival Temperature: 4.9 5.1, 5.3
AGAT WO #: _____
Lab Temperature: 4.0 4.2, 4.0
Notes: 137687543

Turnaround Time Required (TAT) Required*

Regular TAT
☒ 5 to 7 Working Days
Rush TAT (please provide prior notification)
Rush Surcharges Apply
☐ 3 Working Days
☐ 2 Working Days
☐ 1 Working Day
OR
Date Required (Rush surcharges may apply): _____

*TAT is exclusive of weekends and statutory holidays

Sample Identification	Date Sampled	Time Sampled	Sample Matrix	# of Containers	Comments	Site/Sample Information	Metals and Inorganics	Hydride Forming Metals	Client Custom Metals	ORPs: ☐ B-HWS ☐ Cl- ☐ CN- ☐ EC ☐ FOC ☐ Cr+6 ☐ SAR ☐ NO ₂ /NO ₃ ☐ N-Tot ☐ Hg ☐ pH	Nutrients: ☐ TP ☐ NH ₃ ☐ TKN ☐ NO ₂ ☐ NO ₃ ☐ TKN	VOC: ☐ VOC ☐ THM ☐ BTEX	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use
S1	FEB 7		S	4	3 SACS & 1 VIAL															
S2	"		S	4	"															
S3	"		S	4	"															
S4	"		S	4	"															
S5	"		S	4	"															
S6	"		S	4	"															
S7	"		S	4	"															
S8	"		S	4	"															
S9	"		S	4	"															
S10	"		S	4	"															
S11	"		S	4	"															
S12	"		S	4	"															

Samples Relinquished By (Print Name and Sign): D. Blawie Date/Time: 02/11 10:45
Samples Relinquished By (Print Name and Sign): H. Giverson Date/Time: 11-2-03
Pink Copy - Client: 10-45 Date/Time: 3:50
Yellow Copy - AGAT: _____
White Copy - AGAT: _____
Page 1 of 5
No: 189961



Laboratories

Company: PETE MACCALLUM
Contact: GEOFF WAINE
Address: 19 CARPENTILL DRIVE
BARKLY
Phone: 705-734-3400 Fax: 705-734-9911
Project: 13BX001 PO: _____
AGAT Quotation #: 12-949

Company: _____
Contact: _____
Address: _____

GW	Ground Water	O	Oil
SW	Surface Water	P	Paint
SD	Sediment	S	Soil

1. Name: Geoff White
Email: gwhite@peromacallan.com
2. Name: Doug Crishton
Email: dcrishton@peromacallan.com

Sampled	Matrix	Containers	Site/Sample Information
S13	S	4	3 JARS 4 VIAL
S14	S	4	"
S15	S	4	"
S16	S	4	"
S17	S	4	"
S18	S	4	"
S19	S	4	"
S20	S	4	"
S21	S	4	"
S22	S	4	"
S23	S	4	"
S24	S	4	"

02/11/20

Signature Received By (Print Name and Sign): H. Shannon

☒ Regulation 153/04
(Reg. 151 Amend.)

Table 2

☒ Ind/Com

☐ Res/ Park

☐ Agriculture

Soil Texture (check one)

☐ Coarse ☐ Fine

☐ Sewer Use

Region _____

Indicate one

☐ Sanitary

☐ Storm

☐ Regulation 558

☐ CCME

☐ Other (specify) _____

Prov. Water Quality Objectives (PWQO)

☐ None

Is this a drinking water sample? ☐ Yes ☐ No

If "Yes", please use the Drinking Water Chain of Custody Form.

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

*TAT is exclusive of weekends and statutory holidays

Turnaround Time Required (TAT) Required*

Regular TAT
☒ 5 to 7 Working Days

Rush TAT (please provide prior notification)
Rush Surcharges Apply

☐ 3 Working Days
☐ 2 Working Days
☐ 1 Working Day

CR

Date Required (Rush surcharges may apply):

Laboratory Use Only

Arrival Temperature: _____
AGAT WO #: _____
Lab Temperature: _____
Notes: _____

5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
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P: 905.712.5100 • F: 905.712.5122 • TF: 800.856.6261

Page 2 of 5

Yellow Copy - AGAT
White Copy- AGAT

189960

אשר יצאנו אל המלחמה

1



AGAT

Laboratories

5835 Coopers Avenue
Mississauga, ON
L4Z 1V2
www.agatiabs.com · webearth.agatiabs.com

Chain of Custody Record

Client Information

Company: Peto MacEwan Ltd.
Contact: Geoff White
Address: 19 Carverhill Drive
Barrie
Phone: 705 734 3900 Fax: 705 734 9511
Project: 36X001 PO: 12-949
AGAT Quotation #: 12-949

Please note, if quotation number is not provided,
client will be billed full price for analysis.

Invoice To

Company: _____ Same: Yes ☒ No ☐
Contact: _____
Address: _____

Legend Matrix

GW Ground Water O Oil
SW Surface Water P Paint
SD Sediment S Soil

Report Information - reports to be sent to:

1. Name: Geoff White
Email: gwhite@petomacellum.com
2. Name: Doug Christman
Email: dchristman@petomacellum.com

Regulatory Requirements

☒ Regulation 153/04 (MCL 511 Amend.) ☐ Sewer Use
Table 2 Region _____ Indicate one
☒ Ind/Com ☐ Sanitary
☐ Res/Park ☐ Storm
☐ Agriculture
Soil Texture (check one)
☐ Coarse ☐ Fine

Is this a drinking water sample?
(potable water intended for human consumption)
☐ Yes ☒ No

If "Yes", please use the
Drinking Water Chain of Custody Form

Is this submission for a Record of Site Condition?
☐ Yes ☒ No

Turnaround Time Required (TAT) Required*

Regular TAT
☒ 5 to 7 Working Days
Rush TAT (please provide prior notification)
Rush Surcharges Apply
☐ 3 Working Days
☐ 2 Working Days
☐ 1 Working Day
OR
Date Required (Rush surcharges may apply): _____

*TAT is exclusive of weekends and statutory holidays

Laboratory Use Only

Arrival Temperature: 4-3 4-9 3-9
AGAT WO #: _____
Lab Temperature: 4-0 3-9 3-0
Notes: _____

Sample Identification	Date Sampled	Time Sampled	Sample Matrix	# of Containers	Comments Site/Sample Information
S37	FEB 7		S	4	3 JARS & 1 VIAL
S38	"		S	4	"
S39	"		S	4	"
S40	"		S	4	"
S41	"		S	4	"
S42	"		S	4	"
S43	"		S	4	"
S44	"		S	4	"
S45	"		S	4	"
S46	"		S	4	"
S47	"		S	4	"
S48	"		S	4	"

Metals and Inorganics	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒ </
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Samples Requisitioned By (Print Name and Sign): R. Blair Date/Time: 02/11/04 10:45
Samples Received By (Print Name and Sign): H. S. S. S. S. Date/Time: 11-2-13

Pink Copy - Client
Yellow Copy - AGAT
White Copy - AGAT
Page 4 of 5
Nº: 190201



400525

5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
www.agatlabs.com • webearth.agatlabs.com

Laboratories

Chain of Custody Record

Client Information

Company: PETE PINE COLUMB LTD.
 Contact: STOFF WHITE
 Address: 19 CURTIS DRIVE
DARLIS
 Phone: 705 734 3400 Fax: 705 734 9911
 Project: 13BX001 PO: PO:
 AGAT Quotation #: 12-949

Please note, if quotation number is not provided, client will be billed full price for analysis.

Invoice To

Invoice To
 Company: _____
 Contact: _____
 Address: _____
 Same: Yes ☒ No ☐

Legend Matrix

GW	Ground Water	O	Oil
SW	Surface Water	P	Paint
SD	Sediment	S	Soil

Report Information -- reports to be sent to:

1. Name: Sepp Wirtz
Email: sepp.wirtz@macmillan.com
2. Name: Dave Cristofani
Email: davecristofani@macmillan.com

Regulatory Requirements

☒ Regulation 153/04 Reg. 152 Amend.	
Table _____ Indicate one	
☒ Ind./Com	
☐ Res./Park	
☐ Agriculture	
Soil Texture (check one)	
☐ Coarse	☐ Fine

Is this a drinking water sample?
(potable water intended for human consumption)

☐ Yes ☐ No

If "Yes", please use the
Drinking Water Chain of Custody Form

Invoice To

Invoice To

Company: _____

Contact: _____

Address: _____

Same: Yes ☒ No ☐

Requirements

3/04	☐	Sewer Use	☐	Regulation 558
		Region	☐	CCME
		<i>Indicate one</i>	☐	Other (specify)
			☐	Prov. Water Quality Objectives (PWQO)
			☐	None

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

Legend Matrix

GW	Ground Water	O	Oil
SW	Surface Water	P	Paint
SD	Sediment	S	Soil

Report Information -- reports to be sent to:

1. Name: Sepp Wirtz
Email: sepp.wirtz@macmillan.com
2. Name: Dave Cristofani
Email: davecristofani@macmillan.com

Turnaround Time Required (TAT) Required*

Regular TAT
☒ 5 to 7 Working Days

Rush TAT (please provide prior notification)
Rush Surcharges Apply

☐ 3 Working Days
☐ 2 Working Days
☐ 1 Working Day

OR

*TAT is exclusive of weekends and statutory holidays

Report Information -- reports to be sent to:

1. Name: Sepp Wirtz
Email: sepp.wirtz@petromacellum.com
2. Name: Dave Cristofani
Email: dave@holmesinfo.com

☐ NO₂
☐ H₂
☐ CN

and Inorganics

Forming Metals

Custom Metals

8-HWS ☐ Cl- ☐
☐ Cr+6- ☐ SAR ☐
☐ O₂ ☐ N-Total ☐
☐ TP ☐ NH₃ ☐
☐ NO₂ ☐ NO_x/N

OC ☐ THM ☐

actions 1 to 4

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Journal of
Inorganic
Pesticides
and
Organics

Sample Identification

Sample Identification	Date Sampled	Time Sampled	Sample Matrix	# of Containers	Comments Site/Sample Information
549	FEB 7		S	4	3 JARS d I.V.A.L
550	"		S	4	"
551	"		S	4	"
552	"		S	4	"
553	"		S	4	"
554	"		S	4	"
555	"		S	4	"
556	"		S	4	"
557	"		S	4	"
558	"		S	4	"

1100
 CBS
 Regan
 CLP
 Answer

[illegible]

Samples Relinquished By (Print Name and Sign): R. B. Lee

5/12/11	Date/Time
10:45	Date/Time

	Samples Received By (Print Name and Sign):
	H. J. Gumpert
	Samples Received By (Print Name and Sign):

11-2-13	Date/Time
10-4	Date/Time

Pink Copy - Client	Page 5 of 5
Yellow Copy - AGAT	

CLIENT NAME: PETO MACCALLUM
19 CHURCHILL DRIVE
BARRIE, ON L4N8Z5
(705) 734-3900

ATTENTION TO: Geoff White

PROJECT NO: 13BX001

AGAT WORK ORDER: 13T683121

SOIL ANALYSIS REVIEWED BY: Anthony Dapaah, PhD (Chem), Inorganic Lab Manager

TRACE ORGANICS REVIEWED BY: Oksana Gushyla, Analyst

DATE REPORTED: Jan 31, 2013

PAGES (INCLUDING COVER): 13

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***NOTES**

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

Page 1 of 13

Member of: Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.

Results relate only to the items tested and to all the items tested



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(514) - Metals & Inorganics (Soil)									
DATE RECEIVED: 2013-01-25				DATE REPORTED: 2013-01-31					
Parameter	Unit	SAMPLE DESCRIPTION:		S59 Soil	S60 Soil	S61 Soil	DATE SAMPLED: 1/24/2013	RDL	DATE SAMPLED: 1/24/2013
		G / S	G / S						
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	1/24/2013	4095538	4095543
Arsenic	µg/g	18	1	1	1	1	1/24/2013	4095539	4095543
Barium	µg/g	670	2	25	49	32	1/24/2013	4095539	4095543
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	1/24/2013	4095539	4095543
Boron	µg/g	120	5	<5	<5	<5	1/24/2013	4095539	4095543
Boron (Hot Water Soluble)	µg/g	2	0.10	0.20	<0.10	0.17	1/24/2013	4095539	4095543
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	1/24/2013	4095539	4095543
Chromium	µg/g	160	2	7	7	8	1/24/2013	4095539	4095543
Cobalt	µg/g	80	0.5	2.6	2.9	3.2	1/24/2013	4095539	4095543
Copper	µg/g	230	1	8	8	12	1/24/2013	4095539	4095543
Lead	µg/g	120	1	3	3	9	1/24/2013	4095539	4095543
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	1/24/2013	4095539	4095543
Nickel	µg/g	270	1	3	3	4	1/24/2013	4095539	4095543
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	1/24/2013	4095539	4095543
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	1/24/2013	4095539	4095543
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	1/24/2013	4095539	4095543
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	1/24/2013	4095539	4095543
Vanadium	µg/g	86	1	18	20	18	1/24/2013	4095539	4095543
Zinc	µg/g	340	5	22	23	31	1/24/2013	4095539	4095543
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	1/24/2013	4095539	4095543
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	1/24/2013	4095539	4095543
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	1/24/2013	4095539	4095543
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	8.06	3.91	6.90	1/24/2013	4095539	4095543
Sodium Adsorption Ratio	NA	12	NA	70.9	46.1	78.2	1/24/2013	4095539	4095543
pH, 2:1 CaCl2 Extraction	pH Units		NA	8.12	8.13	7.93	1/24/2013	4095539	4095543

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(I)CC - Current
4095538-4095543 EC & SAR were determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

Certified By:

Stony Heath



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Certificate of Analysis

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

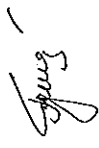
ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)				DATE RECEIVED: 2013-01-25		DATE REPORTED: 2013-01-31	
Parameter	Unit	SAMPLE DESCRIPTION:		DATE SAMPLED:	G / S	RDL	Soil
		S69	S60				
Naphthalene	µg/g	4095538	4095539	1/24/2013	9.6	0.05	Soil
Acenaphthylene	µg/g				0.15	0.05	Soil
Acenaphthene	µg/g				21	0.05	Soil
Fluorene	µg/g				62	0.05	Soil
Phenanthrene	µg/g				12	0.05	Soil
Anthracene	µg/g				0.67	0.05	Soil
Fluoranthene	µg/g				9.6	0.05	Soil
Pyrene	µg/g				96	0.05	Soil
Benz(a)anthracene	µg/g				0.96	0.05	Soil
Chrysene	µg/g				9.6	0.05	Soil
Benzo(b)fluoranthene	µg/g				0.96	0.05	Soil
Benzo(k)fluoranthene	µg/g				0.96	0.05	Soil
Benzo(a)pyrene	µg/g				0.3	0.05	Soil
Indeno(1,2,3-cd)pyrene	µg/g				0.76	0.05	Soil
Dibenz(a,h)anthracene	µg/g				0.1	0.05	Soil
Benzo(g,h,i)perylene	µg/g				9.6	0.05	Soil
2-and 1-methyl Naphthalene	µg/g				30	0.05	Soil
Moisture Content	%				0.1	6.5	Soil
Surrogate	Unit	Acceptable Limits					
Chrysene-d12	%	50-140	94	76	97		

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(ICC) - Current

4095538-4095543 Results are based on the dry weight of the soil.

Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

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AGAT WORK ORDER: 13T683121
PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)

DATE RECEIVED: 2013-01-25

DATE REPORTED: 2013-01-31

Parameter	Unit	SAMPLE DESCRIPTION:		DATE SAMPLED:	G / S	RDL	SAMPLE TYPE:		DATE REPORTED:
		S69	S61				S69	S61	
F1 (C6 to C10)	µg/g	Soil	Soil	1/24/2013	4095538	5	1/24/2013	1/24/2013	4095543
F1 (C6 to C10) minus BTEX	µg/g	<5	<5			5	<5	<5	
F2 (C10 to C16)	µg/g	<5	<5			5	<5	<5	
F2 (C10 to C16) minus Naphthalene	µg/g	<10	<10			230	<10	<10	
F3 (C16 to C34)	µg/g	<10	<10			230	<10	<10	
F3 (C16 to C34) minus PAHs	µg/g	<50	<50			1700	<50	<50	
F4 (C34 to C50)	µg/g	<50	<50			1700	<50	<50	
Gravimetric Heavy Hydrocarbons	µg/g	<50	<50			3300	<50	<50	
Moisture Content	%	NA	NA			3300	NA	NA	
Surrogate	Unit	Acceptable Limits				0.1	7.6	5.7	
Terphenyl	%	60-140	91				88	101	

Comments: RDL - Reported Detection Limit: G / S - Guideline / Standard: Refers to T2(ICC) - Current

4095538-4095543 Results are based on sample dry weight.
The C6-C10 fraction is calculated using the average response factor for n-C10, n-C16, and n-C34.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC16, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - VOCs (Soil)				DATE REPORTED: 2013-01-31			
DATE RECEIVED: 2013-01-25							
Parameter	Unit	SAMPLE DESCRIPTION:		S59 Soil	S60 Soil	S61 Soil	
		G / S	RDL				
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	
Vinyl Chloride	µg/g	0.032	0.02	<0.02	<0.02	<0.02	
Bromomethane	µg/g	0.05	0.05	<0.05	<0.05	<0.05	
Trichlorofluoromethane	µg/g	4	0.05	<0.05	<0.05	<0.05	
Acetone	µg/g	16	0.50	<0.50	<0.50	<0.50	
1,1-Dichloroethylene	µg/g	0.064	0.05	<0.05	<0.05	<0.05	
Methylene Chloride	µg/g	1.6	0.05	<0.05	<0.05	<0.05	
Trans-1,2-Dichloroethylene	µg/g	1.3	0.05	<0.05	<0.05	<0.05	
Methyl tert-butyl Ether	µg/g	1.6	0.05	<0.05	<0.05	<0.05	
1,1-Dichloroethane	µg/g	0.47	0.02	<0.02	<0.02	<0.02	
Methyl Ethyl Ketone	µg/g	70	0.50	<0.50	<0.50	<0.50	
Cis-1,2-Dichloroethylene	µg/g	1.9	0.02	<0.02	<0.02	<0.02	
Chloroform	µg/g	0.47	0.04	<0.04	<0.04	<0.04	
1,2-Dichloroethane	µg/g	0.05	0.03	<0.03	<0.03	<0.03	
1,1,1-Trichloroethane	µg/g	6.1	0.05	<0.05	<0.05	<0.05	
Carbon Tetrachloride	µg/g	0.21	0.05	<0.05	<0.05	<0.05	
Benzene	µg/g	0.32	0.02	<0.02	<0.02	<0.02	
1,2-Dichloropropane	µg/g	0.16	0.03	<0.03	<0.03	<0.03	
Trichloroethylene	µg/g	0.55	0.03	<0.03	<0.03	<0.03	
Bromodichloromethane	µg/g	1.5	0.05	<0.05	<0.05	<0.05	
Methyl Isobutyl Ketone	µg/g	31	0.50	<0.50	<0.50	<0.50	
1,1,2-Trichloroethane	µg/g	0.05	0.04	<0.04	<0.04	<0.04	
Toluene	µg/g	6.4	0.05	<0.05	<0.05	<0.05	
Dibromochloromethane	µg/g	2.3	0.05	<0.05	<0.05	<0.05	
Ethylene Dibromide	µg/g	0.05	0.04	<0.04	<0.04	<0.04	
Tetrachloroethylene	µg/g	1.9	0.05	<0.05	<0.05	<0.05	
1,1,1,2-Tetrachloroethane	µg/g	0.087	0.04	<0.04	<0.04	<0.04	
Chlorobenzene	µg/g	2.4	0.05	<0.05	<0.05	<0.05	
Ethylbenzene	µg/g	1.1	0.05	<0.05	<0.05	<0.05	
m & p-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	
Bromoform	µg/g	0.61	0.05	<0.05	<0.05	<0.05	

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Certificate of Analysis

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

AGAT Laboratories

CLIENT NAME: PETO MACCALLUM

O. Reg. 153(511) - VOCs (Soil)									
DATE RECEIVED: 2013-01-25				DATE REPORTED: 2013-01-31					
Parameter	Unit	SAMPLE DESCRIPTION:			SAMPLE TYPE:	DATE SAMPLED:	G / S	RDL	Soil
		S59	S60	S61					
Styrene	ug/g	34	0.05	<0.05	Soil	1/24/2013	4095538	4095543	Soil
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
o-Xylene	ug/g	0.05	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
Xylene Mixture	ug/g	26	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
1,3-Dichloropropene	ug/g	0.059	0.04	<0.04	Soil	1/24/2013	4095539	4095543	Soil
n-Hexane	ug/g	46	0.05	<0.05	Soil	1/24/2013	4095539	4095543	Soil
Surrogate	Unit	Acceptable Limits							
Toluene-d8	% Recovery	50-140							
4-Bromofluorobenzene	% Recovery	50-140							

Comments: RDL - Reported Detection Limit, G / S - Guideline / Standard: Refers to T2(CC) - Current
4095538-4095543 The sample was analysed using the high level technique. The sample was
extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed.
Results are based on the dry weight of the soil.

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Guideline Violation

Laboratories

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AGAT WORK ORDER: 13T683121
PROJECT NO: 13BX001

CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
4095538	S59	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	1.4	8.06
4095538	S59	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio	12	70.9
4095539	S60	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	1.4	3.91
4095539	S60	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio	12	46.1
4095543	S61	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	1.4	6.90
4095543	S61	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio	12	78.2



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Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Soil Analysis															
RPT Date: Jan 31, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	4095539	< 0.8	< 0.8	0.0%	< 0.8	102%	70%	130%	103%	80%	120%	99%	70%	130%
Arsenic	1	4095539	1	1	0.0%	< 1	108%	70%	130%	104%	80%	120%	106%	70%	130%
Barium	1	4095539	49	52	5.9%	< 2	100%	70%	130%	106%	80%	120%	109%	70%	130%
Beryllium	1	4095539	< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	101%	80%	120%	91%	70%	130%
Boron	1	4095539	< 5	< 5	0.0%	< 5	89%	70%	130%	108%	80%	120%	102%	70%	130%
Boron (Hot Water Soluble)	1	4095543	0.17	0.16	7.1%	< 0.10	103%	60%	140%	92%	70%	130%	106%	60%	140%
Cadmium	1	4095539	< 0.5	< 0.5	0.0%	< 0.5	101%	70%	130%	110%	80%	120%	111%	70%	130%
Chromium	1	4095539	7	8	13.3%	< 2	106%	70%	130%	107%	80%	120%	105%	70%	130%
Cobalt	1	4095539	2.9	2.9	0.0%	< 0.5	103%	70%	130%	105%	80%	120%	101%	70%	130%
Copper	1	4095539	8	8	0.0%	< 1	103%	70%	130%	105%	80%	120%	98%	70%	130%
Lead	1	4095539	3	2	NA	< 1	102%	70%	130%	103%	80%	120%	98%	70%	130%
Molybdenum	1	4095539	< 0.5	< 0.5	0.0%	< 0.5	98%	70%	130%	104%	80%	120%	112%	70%	130%
Nickel	1	4095539	3	3	0.0%	< 1	107%	70%	130%	104%	80%	120%	99%	70%	130%
Selenium	1	4095539	< 0.4	< 0.4	0.0%	< 0.4	106%	70%	130%	103%	80%	120%	103%	70%	130%
Silver	1	4095539	< 0.2	< 0.2	0.0%	< 0.2	89%	70%	130%	111%	80%	120%	110%	70%	130%
Thallium	1	4095539	< 0.4	< 0.4	0.0%	< 0.4	91%	70%	130%	102%	80%	120%	101%	70%	130%
Uranium	1	4095539	< 0.5	< 0.5	0.0%	< 0.5	98%	70%	130%	103%	80%	120%	102%	70%	130%
Vanadium	1	4095539	20	20	0.0%	< 1	105%	70%	130%	103%	80%	120%	105%	70%	130%
Zinc	1	4095539	23	23	0.0%	< 5	100%	70%	130%	112%	80%	120%	103%	70%	130%
Chromium VI	1		< 0.2	< 0.2	0.0%	< 0.2	93%	70%	130%	93%	80%	120%	93%	70%	130%
Cyanide	1		< 0.040	< 0.040	0.0%	< 0.040	103%	70%	130%	110%	80%	120%	116%	70%	130%
Mercury	1	4095539	< 0.10	< 0.10	0.0%	< 0.10	103%	70%	130%	98%	80%	120%	100%	70%	130%
Electrical Conductivity (2:1)	1		0.739	0.792	6.9%	< 0.005	103%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1		9.07	9.42	3.8%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1		7.86	7.86	0.0%	NA	100%	90%	110%	NA			NA		

Comments: NA signifies Not Applicable. As the average value (Pb) for the sample and a duplicate is less than 5X RDL, lab's RPD acceptance criteria is not applicable.

Certified By:

AGAT QUALITY ASSURANCE REPORT (V1)

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Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

Trace Organics Analysis															
RPT Date: Jan 31, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 163(511) - VOCs (Soil)															
Dichlorodifluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	110%	50%	140%	117%	50%	140%
Vinyl Chloride	1		< 0.02	< 0.02	0.0%	< 0.02	89%	50%	140%	102%	50%	140%	101%	50%	140%
Bromomethane	1		< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	76%	50%	140%	95%	50%	140%
Trichlorofluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	77%	50%	140%	95%	50%	140%	107%	50%	140%
Acetone	1		< 0.50	< 0.50	0.0%	< 0.50	115%	50%	140%	107%	50%	140%	123%	50%	140%
1,1-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	101%	60%	130%	100%	50%	140%
Methylene Chloride	1		< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	108%	60%	130%	113%	50%	140%
Trans- 1,2-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	101%	60%	130%	97%	50%	140%
Methyl tert-butyl Ether	1		< 0.05	< 0.05	0.0%	< 0.05	77%	50%	140%	110%	60%	130%	91%	50%	140%
1,1-Dichloroethane	1		< 0.02	< 0.02	0.0%	< 0.02	80%	50%	140%	101%	60%	130%	95%	50%	140%
Methyl Ethyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	108%	50%	140%	118%	50%	140%	101%	50%	140%
Cis- 1,2-Dichloroethylene	1		< 0.02	< 0.02	0.0%	< 0.02	78%	50%	140%	102%	60%	130%	97%	50%	140%
Chloroform	1		< 0.04	< 0.04	0.0%	< 0.04	77%	50%	140%	101%	60%	130%	97%	50%	140%
1,2-Dichloroethane	1		< 0.03	< 0.03	0.0%	< 0.03	74%	50%	140%	103%	60%	130%	96%	50%	140%
1,1,1-Trichloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	94%	60%	130%	92%	50%	140%
Carbon Tetrachloride	1		< 0.05	< 0.05	0.0%	< 0.05	66%	50%	140%	86%	60%	130%	89%	50%	140%
Benzene	1		< 0.02	< 0.02	0.0%	< 0.02	79%	50%	140%	103%	60%	130%	97%	50%	140%
1,2-Dichloropropane	1		< 0.03	< 0.03	0.0%	< 0.03	75%	50%	140%	103%	60%	130%	95%	50%	140%
Trichloroethylene	1		< 0.03	< 0.03	0.0%	< 0.03	77%	50%	140%	99%	60%	130%	96%	50%	140%
Bromodichloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	72%	50%	140%	95%	60%	130%	90%	50%	140%
Methyl Isobutyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	66%	50%	140%	114%	50%	140%	96%	50%	140%
1,1,2-Trichloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	78%	50%	140%	98%	60%	130%	93%	50%	140%
Toluene	1		< 0.05	< 0.05	0.0%	< 0.05	78%	50%	140%	98%	60%	130%	95%	50%	140%
Dibromochloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	70%	50%	140%	88%	60%	130%	85%	50%	140%
Ethylene Dibromide	1		< 0.04	< 0.04	0.0%	< 0.04	71%	50%	140%	96%	60%	130%	90%	50%	140%
Tetrachloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	93%	60%	130%	93%	50%	140%
1,1,1,2-Tetrachloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	87%	60%	130%	82%	50%	140%
Chlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	76%	50%	140%	95%	60%	130%	92%	50%	140%
Ethylbenzene	1		< 0.05	< 0.05	0.0%	< 0.05	73%	50%	140%	92%	60%	130%	90%	50%	140%
m & p-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	75%	50%	140%	93%	60%	130%	91%	50%	140%
Bromoform	1		< 0.05	< 0.05	0.0%	< 0.05	63%	50%	140%	85%	60%	130%	83%	50%	140%
Styrene	1		< 0.05	< 0.05	0.0%	< 0.05	63%	50%	140%	91%	60%	130%	86%	50%	140%
1,1,2,2-Tetrachloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	80%	50%	140%	102%	60%	130%	95%	50%	140%
o-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	75%	50%	140%	93%	60%	130%	91%	50%	140%
1,3-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	95%	60%	130%	90%	50%	140%
1,4-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	76%	50%	140%	96%	60%	130%	93%	50%	140%
1,2-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	74%	50%	140%	95%	60%	130%	90%	50%	140%
Xylene Mixture	1		< 0.05	< 0.05	0.0%	< 0.05	75%	50%	140%	93%	60%	130%	91%	50%	140%
1,3-Dichloropropene	1		< 0.04	< 0.04	0.0%	< 0.04	67%	50%	140%	90%	60%	130%	79%	50%	140%



Quality Assurance

CLIENT NAME: PETO MACCALLUM
PROJECT NO: 13BX001

AGAT WORK ORDER: 13T683121
ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)															
RPT Date: Jan 31, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	104%	60%	130%	99%	50%	140%
O. Reg. 163(511) - PHCs F1 - F4 (with PAHs) (Soil)															
F1 (C6 to C10)	1		< 5	< 5	0.0%	< 5	89%	60%	140%	86%	80%	120%	85%	60%	140%
F2 (C10 to C16)	1		< 10	< 10	0.0%	< 10	103%	60%	140%	97%	80%	120%	78%	60%	140%
F3 (C16 to C34)	1		< 50	< 50	0.0%	< 50	103%	60%	140%	84%	80%	120%	83%	60%	140%
F4 (C34 to C50)	1		< 50	< 50	0.0%	< 50	103%	60%	140%	98%	80%	120%	74%	60%	140%
O. Reg. 163(511) - PAHs (Soil)															
Naphthalene	1		< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	80%	50%	140%	75%	50%	140%
Acenaphthylene	1		< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	76%	50%	140%	70%	50%	140%
Acenaphthene	1		< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	79%	50%	140%	74%	50%	140%
Fluorene	1		< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	77%	50%	140%	74%	50%	140%
Phenanthrene	1		< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	78%	50%	140%	80%	50%	140%
Anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	78%	50%	140%	81%	50%	140%
Fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	74%	50%	140%	82%	50%	140%
Pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	74%	50%	140%	82%	50%	140%
Benz(a)anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	85%	50%	140%	67%	50%	140%	74%	50%	140%
Chrysene	1		< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	79%	50%	140%	83%	50%	140%
Benzo(b)fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	74%	50%	140%	84%	50%	140%
Benzo(k)fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	83%	50%	140%	88%	50%	140%
Benzo(a)pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	75%	50%	140%	86%	50%	140%
Indeno(1,2,3-cd)pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	68%	50%	140%	69%	50%	140%
Dibenz(a,h)anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	86%	50%	140%	65%	50%	140%	71%	50%	140%
Benzo(g,h,i)perylene	1		< 0.05	< 0.05	0.0%	< 0.05	90%	50%	140%	72%	50%	140%	80%	50%	140%
2-and 1-methyl Naphthalene	1		< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	74%	50%	140%	69%	50%	140%

Certified By:



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Arsenic	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Barium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	EPA SW 846 6010C; MSA, Part 3, Ch.21	ICP/OES
Cadmium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Copper	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Lead	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Nickel	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Selenium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Silver	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Thallium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Uranium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Zinc	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium VI	INOR-93-6029	SM 3500 B; MSA Part 3, Ch. 25	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE CN-3015 & E 3009 A; SM 4500 CN	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	McKeague 4.12, SM 2510 B	EC METER
Sodium Adsorption Ratio	INOR-93-6007	McKeague 4.12 & 3.26 & EPA SW-846 6010C	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	MSA part 3 & SM 4500-H+ B	PH METER



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluorene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Phenanthrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Chrysene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Moisture Content	Org 5506	EPA SW-846 3540 & 8270	BALANCE
Chrysene-d12	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
F1 (C6 to C10)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	CCME Tier 1 Method	GC / FID
F4 (C34 to C50)	VOL-91-5009	CCME Tier 1 Method	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	CCME Tier 1 Method	GRAVIMETRIC ANALYSIS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009		GC/FID
Dichlorodifluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Acetone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Benzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T683121

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl Isobutyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromoform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Styrene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



Laboratories

5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
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Laboratory Use Only

Arrival Temperature: 55 6-1-5-2
AGAT WO #: _____
Lab Temperature: 22 4-5 3-5
Notes: 13T683121

Chain of Custody Record

P: 905.712.5100 • F: 905.712.5122 • TF: 800.856.6261

Client Information

Company: Peto Macalum Ltd
Contact: Geoff White
Address: 19 Church Hill Drive, Barry, on
Phone: 705-734-3900 Fax: 705-734-9911
Project: 13BX001 PO: _____
AGAT Quotation #: 10-484

Regulatory Requirements

☒ Regulation 153/04 (eg. SLI Amend.)	☐ Sewer Use	☐ Regulation 558
Table 2	Region	CCME
<u>Indicate one</u>	<u>Indicate one</u>	
☒ Ind/Com	☐ Sanitary	☐ Other (specify)
☐ Rcs/Park	☐ Storm	
☐ Agriculture		☐ Prov. Water Quality Objectives (PWQO)
Soil Texture (check one)		☐ None
☐ Coarse	☐ Fine	

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2
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☐ Sewer Use	☐ Regulation 558	☐ Regular TAT
☐ Region	☐ COME	☒ 5 to 7 Working Days
☐ <i>Indicate one</i>	☐ Other (specify) _____	☐ Rush TAT (please print)
☐ Sanitary	☐ Prov. Water Quality Objectives (PWQO)	☐ Rush Surcharges Apply
☐ Storm	☐ None	☐ 3 Working Days
		☐ 2 Working Days
		☐ 1 Working Day

Turnaround Time Required (TAT) Required*

Regular TAT ☒ 5 to 7 Working Days

Rush TAT (please provide prior notification)
Rush Surcharges Apply

☐ 3 Working Days

☐ 2 Working Days

☐ 1 Working Day

OR

Invoice To

Company: _____

Contact: _____

Address: _____

Same: Yes ☒ No ☐

(potable water intended for human consumption)

☐ Yes ☐ No

If "Yes", please use the
Drinking Water Chain of Custody Form

Legend Matrix

GW	Ground Water	O	Oil
SW	Surface Water	P	Paint
SD	Sediment	S	Soil

Report Information – reports to be sent to:

1. Name: Jeff Gault White
Email: gwhite@petemaccallum.com

2. Name: Richard Blair
Email: rblair@petemaccallum.com

[illegible]

Samples Relinquished By (Print Name and Sign):	Tennille Egg	Order Time T-88	Samples Received By (Print Name and Sign): H. Sumanak	Order Time 25-1-13	Date/Time 10/4/5	Pink Copy - Client
Samples Relinquished By (Print Name and Sign):		Order Time	Samples Received By (Print Name and Sign):	Order Time	Order Time	Yellow Copy - AGAT
					4:00 PM	White Copy- AGAT
						Page 1 of 1
						Nº: 185859

CLIENT NAME: PETO MACCALLUM
19 CHURCHILL DRIVE
BARRIE, ON L4N8Z5
(705) 734-3900

ATTENTION TO: Geoff White

PROJECT NO: 13BX001

AGAT WORK ORDER: 13T685626

SOIL ANALYSIS REVIEWED BY: Mike Muneswar, BSc (Chem), Senior Inorganic Analyst

TRACE ORGANICS REVIEWED BY: Oksana Gushyla, Analyst

DATE REPORTED: Feb 11, 2013

PAGES (INCLUDING COVER): 12

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***NOTES**

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

Page 1 of 12

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of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

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Results relate only to the items tested and to all the items tested



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T685626
PROJECT NO: 13BX001

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905) 712-5122
http://www.agatlabs.com

CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - Metals & Inorganics (Soil)									
DATE RECEIVED: 2013-02-04				DATE REPORTED: 2013-02-11					
		SAMPLE DESCRIPTION:		BH1S5	BH1S3	BH2S4	BH2S6	BH3S5	BH3S8
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2/1/2013	2/1/2013	2/1/2013	2/1/2013	2/1/2013	2/1/2013
Parameter	Unit	G/S	RDL	4112125	4112126	4112130	4112134	4112138	4112144
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	<1	1	<1	1	1	1
Barium	µg/g	670	2	11	23	16	27	49	23
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	<5	<5	<5	<5	<5	<5
Boron (Hot Water Soluble)	µg/g	2	0.10	<0.10	0.11	0.10	0.17	<0.10	0.13
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	9	14	11	29	10	7
Cobalt	µg/g	80	0.5	2.0	2.7	2.0	2.3	3.4	1.9
Copper	µg/g	230	1	5	7	5	10	7	19
Lead	µg/g	120	1	2	3	5	6	2	14
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5
Nickel	µg/g	270	1	4	8	5	14	5	3
Selenium	µg/g	5.5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	17	16	14	14	21	15
Zinc	µg/g	340	5	8	16	15	19	17	19
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.17
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.078	0.163	0.154	0.722	0.100	0.313
Sodium Adsorption Ratio	NA	12	NA	0.171	0.576	0.497	0.700	0.174	1.88
pH, 2:1 CaCl2 Extraction	pH Units		NA	8.19	7.91	9.44	11.5	7.99	7.86

Comments: RDL - Reported Detection Limit; G/S - Guideline / Standard; Refers to T2(CC) - Current

4112125-4112144 EC & SAR were determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

Certified By:

Phil Munson



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

5835 COOPERS AVENUE
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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PAHs (Soil)										
DATE RECEIVED: 2013-02-04				DATE REPORTED: 2013-02-11						
Parameter	Unit	SAMPLE DESCRIPTION:			BH1S5 Soil 2/1/2013 4112125	BH1S3 Soil 2/1/2013 4112126	BH2S4 Soil 2/1/2013 4112130	BH2S6 Soil 2/1/2013 4112134	BH3S5 Soil 2/1/2013 4112138	
		SAMPLE TYPE:		G / S						RDL
		DATE SAMPLED:								
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Phenanthrene	µg/g	12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Fluoranthene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Pyrene	µg/g	96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benz(a)anthracene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Chrysene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(b)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(k)fluoranthene	µg/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(g,h,i)perylene	µg/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
2-and 1-methyl Naphthalene	µg/g	30	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Moisture Content	%	0.1		4.5	12.1	5.4	6.6	9.2		
Surrogate	Unit	Acceptable Limits								
Chrysene-d12	%	50-140								
		96			97		96		100	

Comments: RDL - Reported Detection Limit; G/S - Guideline / Standard; Refers to T2(CC) - Current

4112125-4112138 Results are based on the dry weight of the soil.

Note: The result for Benzo(b)fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

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CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)										DATE REPORTED: 2013-02-11
DATE RECEIVED: 2013-02-04										
SAMPLE DESCRIPTION:										BH3S5
SAMPLE TYPE:										Soil
DATE SAMPLED:										2/1/2013
G / S RDL										4112134 4112138
Parameter	Unit	G / S	RDL	BH1S5	BH1S3	BH2S4	BH2S6			
F1 (C6 to C10)	µg/g	55	5	<5	<5	<5	<5	<5	<5	
F1 (C6 to C10) minus BTEX	µg/g	230	10	<10	<10	<10	<10	<10	<10	
F2 (C10 to C16) minus Naphthalene	µg/g	1700	50	<50	<50	<50	<50	<50	<50	
F3 (C16 to C34) minus PAHs	µg/g	3300	50	<50	<50	<50	<50	<50	<50	
F4 (C34 to C50)	µg/g	3300	50	NA	NA	NA	NA	NA	NA	
Gravimetric Heavy Hydrocarbons	%	0.1	4.5	12.1	5.4	6.6	9.2	9.2	9.2	
Moisture Content	Unit	Acceptable Limits								
Surrogate	%	60-140								108
Terphenyl	%									104

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(OC) - Current

4112125-4112138 Results are based on sample dry weight.

The C6-C10 fraction is calculated using toluene response factor.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.

Total C6 - C50 results are corrected for BTEX and PAH contributions.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

nC6 and nC10 response factors are within 30% of Toluene response factor.

nC10, nC16 and nC34 response factors are within 10% of their average.

C50 response factor is within 70% of nC10 + nC16 + nC34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

Certified By:

AGAT CERTIFICATE OF ANALYSIS (V1)

Results relate only to the items tested and to all the items tested

Certificate of Analysis

AGAT WORK ORDER: 13T685626
PROJECT NO: 13BX001



CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

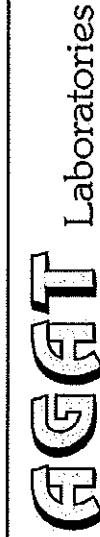
O. Reg. 153(511) - VOCs (Soil)										DATE REPORTED: 2013-02-11	
DATE RECEIVED: 2013-02-04											
Parameter	Unit	SAMPLE DESCRIPTION:			BH1S5 Soil	BH1S3 Soil	BH2S4 Soil	BH2S6 Soil	BH3S5 Soil		
		SAMPLE TYPE:		DATE SAMPLED:							
		G/S	RDL								
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Vinyl Chloride	µg/g	0.032	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
Bromomethane	µg/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Trichlorofluoromethane	µg/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Acetone	µg/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1,1,1-Dichloroethylene	µg/g	0.064	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Methylene Chloride	µg/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Trans- 1,2-Dichloroethylene	µg/g	1.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Methyl ter-butyl Ether	µg/g	1.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
1,1-Dichloroethane	µg/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
Methyl Ethyl Ketone	µg/g	70	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Cis- 1,2-Dichloroethylene	µg/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
Chloroform	µg/g	0.47	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
1,2-Dichloroethane	µg/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		
1,1,1-Trichloroethane	µg/g	6.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Carbon Tetrachloride	µg/g	0.21	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Benzene	µg/g	0.32	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
1,2-Dichloropropane	µg/g	0.16	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		
Trichloroethylene	µg/g	0.55	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		
Bromodichloromethane	µg/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Methyl Isobutyl Ketone	µg/g	31	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
1,1,2-Trichloroethane	µg/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Toluene	µg/g	6.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Dibromochloromethane	µg/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Ethylene Dibromide	µg/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Tetrachloroethylene	µg/g	1.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
1,1,1,2-Tetrachloroethane	µg/g	0.087	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Chlorobenzene	µg/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Ethylbenzene	µg/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
m & p-Xylene	µg/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Bromoform	µg/g	0.61	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		

Geoff

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 13T685626
PROJECT NO: 13BX001



CLIENT NAME: PETO MACCALLUM

ATTENTION TO: Geoff White

DATE RECEIVED: 2013-02-04		O. Reg. 153(511) - VOCs (Soil)				DATE REPORTED: 2013-02-11	
SAMPLE DESCRIPTION:		BH1S5	BH1S3	BH2S4	BH2S6	BH3S5	
SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	
DATE SAMPLED:		2/1/2013	2/1/2013	2/1/2013	2/1/2013	2/1/2013	
Parameter	Unit	G / S	RDL	4112125	4112126	4112130	4112134
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	ug/g	0.059	0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	ug/g	46	0.05	<0.05	<0.05	<0.05	<0.05
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140	108	110	120	104	101
4-Bromofluorobenzene	% Recovery	50-140	104	91	92	87	82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T2(CC) - Current

4112125-4112126 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

4112130 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

4112134-4112138 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

Geoff White

Certified By:

Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

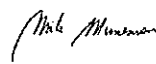
ATTENTION TO: Geoff White

Soil Analysis															
RPT Date: Feb 11, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	4112130	< 0.8	< 0.8	0.0%	< 0.8	117%	70%	130%	84%	80%	120%	100%	70%	130%
Arsenic	1	4112130	< 1	1	NA	< 1	111%	70%	130%	89%	80%	120%	107%	70%	130%
Barium	1	4112130	16	17	6.1%	< 2	95%	70%	130%	80%	80%	120%	96%	70%	130%
Beryllium	1	4112130	< 0.5	< 0.5	0.0%	< 0.5	97%	70%	130%	98%	80%	120%	109%	70%	130%
Boron	1	4112130	< 5	< 5	0.0%	< 5	77%	70%	130%	102%	80%	120%	122%	70%	130%
Boron (Hot Water Soluble)	1	4112125	<0.10	<0.10	0.0%	< 0.10	107%	60%	140%	96%	70%	130%	99%	60%	140%
Cadmium	1	4112130	< 0.5	< 0.5	0.0%	< 0.5	108%	70%	130%	91%	80%	120%	104%	70%	130%
Chromium	1	4112130	11	11	0.0%	< 2	100%	70%	130%	88%	80%	120%	104%	70%	130%
Cobalt	1	4112130	2.0	2.0	0.0%	< 0.5	104%	70%	130%	92%	80%	120%	106%	70%	130%
Copper	1	4112130	5	5	0.0%	< 1	100%	70%	130%	84%	80%	120%	94%	70%	130%
Lead	1	4112130	5	5	0.0%	< 1	96%	70%	130%	80%	80%	120%	92%	70%	130%
Molybdenum	1	4112130	< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	87%	80%	120%	107%	70%	130%
Nickel	1	4112130	5	5	0.0%	< 1	107%	70%	130%	91%	80%	120%	104%	70%	130%
Selenium	1	4112130	< 0.4	< 0.4	0.0%	< 0.4	117%	70%	130%	87%	80%	120%	104%	70%	130%
Silver	1	4112130	< 0.2	< 0.2	0.0%	< 0.2	77%	70%	130%	88%	80%	120%	106%	70%	130%
Thallium	1	4112130	< 0.4	< 0.4	0.0%	< 0.4	99%	70%	130%	86%	80%	120%	99%	70%	130%
Uranium	1	4112130	< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	84%	80%	120%	100%	70%	130%
Vanadium	1	4112130	14	16	13.3%	< 1	104%	70%	130%	93%	80%	120%	111%	70%	130%
Zinc	1	4112130	15	15	0.0%	< 5	106%	70%	130%	106%	80%	120%	114%	70%	130%
Chromium VI	1	4112143	< 0.2	< 0.2	0.0%	< 0.2	97%	70%	130%	99%	80%	120%	91%	70%	130%
Cyanide	1		< 0.040	< 0.040	0.0%	< 0.040	92%	70%	130%	108%	80%	120%	94%	70%	130%
Mercury	1	4112130	< 0.10	< 0.10	0.0%	< 0.10	113%	70%	130%	108%	80%	120%	107%	70%	130%
Electrical Conductivity (2:1)	1	4112125	0.078	0.077	1.3%	< 0.005	92%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	4112125	0.171	0.161	6.1%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1	4112144	7.86	7.82	0.5%	NA	102%	90%	110%	NA			NA		

Comments: NA signifies Not Applicable.

RPD Qualifier: Arsenic - The average for the sample and duplicate is less than 5X RDL, thus, lab's RPD acceptance criteria are not applicable.

Certified By:



AGAT QUALITY ASSURANCE REPORT (V1)

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Results relate only to the items tested and to all the items tested



Quality Assurance

CLIENT NAME: PETO MACCALLUM
PROJECT NO: 13BX001

AGAT WORK ORDER: 13T685626
ATTENTION TO: Geoff White

Trace Organics Analysis															
RPT Date: Feb 11, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 163(511) - VOCs (Soil)															
Dichlorodifluoromethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	91%	50%	140%	102%	50%	140%	104%	50%	140%
Vinyl Chloride	1	4112138	< 0.02	< 0.02	0.0%	< 0.02	110%	50%	140%	94%	50%	140%	111%	50%	140%
Bromomethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	94%	50%	140%	94%	50%	140%
Trichlorofluoromethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	100%	50%	140%	108%	50%	140%
Acetone	1	4112138	< 0.50	< 0.50	0.0%	< 0.50	111%	50%	140%	84%	50%	140%	94%	50%	140%
1,1-Dichloroethylene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	102%	60%	130%	102%	50%	140%
Methylene Chloride	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	116%	60%	130%	115%	50%	140%
Trans- 1,2-Dichloroethylene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	101%	60%	130%	120%	50%	140%
Methyl tert-butyl Ether	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	99%	60%	130%	106%	50%	140%
1,1-Dichloroethane	1	4112138	< 0.02	< 0.02	0.0%	< 0.02	116%	50%	140%	97%	60%	130%	107%	50%	140%
Methyl Ethyl Ketone	1	4112138	< 0.50	< 0.50	0.0%	< 0.50	91%	50%	140%	111%	50%	140%	111%	50%	140%
Cis- 1,2-Dichloroethylene	1	4112138	< 0.02	< 0.02	0.0%	< 0.02	98%	50%	140%	81%	60%	130%	108%	50%	140%
Chloroform	1	4112138	< 0.04	< 0.04	0.0%	< 0.04	109%	50%	140%	85%	60%	130%	110%	50%	140%
1,2-Dichloroethane	1	4112138	< 0.03	< 0.03	0.0%	< 0.03	122%	50%	140%	109%	60%	130%	121%	50%	140%
1,1,1-Trichloroethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	105%	60%	130%	117%	50%	140%
Carbon Tetrachloride	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	103%	50%	140%	112%	60%	130%	109%	50%	140%
Benzene	1	4112138	< 0.02	< 0.02	0.0%	< 0.02	105%	50%	140%	105%	60%	130%	109%	50%	140%
1,2-Dichloropropane	1	4112138	< 0.03	< 0.03	0.0%	< 0.03	98%	50%	140%	85%	60%	130%	102%	50%	140%
Trichloroethylene	1	4112138	< 0.03	< 0.03	0.0%	< 0.03	109%	50%	140%	107%	60%	130%	110%	50%	140%
Bromodichloromethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	96%	50%	140%	89%	60%	130%	97%	50%	140%
Methyl Isobutyl Ketone	1	4112138	< 0.50	< 0.50	0.0%	< 0.50	85%	50%	140%	93%	50%	140%	91%	50%	140%
1,1,2-Trichloroethane	1	4112138	< 0.04	< 0.04	0.0%	< 0.04	114%	50%	140%	78%	60%	130%	118%	50%	140%
Toluene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	100%	60%	130%	106%	50%	140%
Dibromochloromethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	91%	50%	140%	79%	60%	130%	114%	50%	140%
Ethylene Dibromide	1	4112138	< 0.04	< 0.04	0.0%	< 0.04	119%	50%	140%	115%	60%	130%	120%	50%	140%
Tetrachloroethylene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	114%	50%	140%	101%	60%	130%	116%	50%	140%
1,1,1,2-Tetrachloroethane	1	4112138	< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	91%	60%	130%	116%	50%	140%
Chlorobenzene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	112%	60%	130%	113%	50%	140%
Ethylbenzene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	105%	60%	130%	104%	50%	140%
m & p-Xylene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	102%	60%	130%	103%	50%	140%
Bromoform	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	90%	60%	130%	89%	50%	140%
Styrene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	89%	60%	130%	119%	50%	140%
1,1,2,2-Tetrachloroethane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	85%	60%	130%	110%	50%	140%
o-Xylene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	96%	50%	140%	112%	60%	130%	92%	50%	140%
1,3-Dichlorobenzene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	105%	50%	140%	92%	60%	130%	105%	50%	140%
1,4-Dichlorobenzene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	96%	60%	130%	117%	50%	140%
1,2-Dichlorobenzene	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	92%	60%	130%	118%	50%	140%
Xylene Mixture	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	96%	50%	140%	112%	60%	130%	92%	50%	140%
1,3-Dichloropropene	1	4112138	< 0.04	< 0.04	0.0%	< 0.04	113%	50%	140%	117%	60%	130%	117%	50%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

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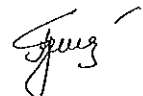
Quality Assurance

CLIENT NAME: PETO MACCALLUM
PROJECT NO: 13BX001

AGAT WORK ORDER: 13T685626
ATTENTION TO: Geoff White

Trace Organics Analysis (Continued)

RPT Date: Feb 11, 2013			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1	4112138	< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	88%	60%	130%	111%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Soil)															
F1 (C6 to C10)	1	4112138	< 5	< 5	0.0%	< 5	102%	60%	140%	114%	80%	120%	104%	60%	140%
F2 (C10 to C16)	1	4112138	< 10	< 10	0.0%	< 10	108%	60%	140%	100%	80%	120%	82%	60%	140%
F3 (C16 to C34)	1	4112138	< 50	< 50	0.0%	< 50	72%	60%	140%	97%	80%	120%	100%	60%	140%
F4 (C34 to C50)	1	4112138	< 50	< 50	0.0%	< 50	107%	60%	140%	92%	80%	120%	81%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	84%	50%	140%	81%	50%	140%
Acenaphthylene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	86%	50%	140%	75%	50%	140%
Acenaphthene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	90%	50%	140%	79%	50%	140%
Fluorene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	102%	50%	140%	83%	50%	140%	76%	50%	140%
Phenanthrene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	84%	50%	140%	79%	50%	140%
Anthracene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	90%	50%	140%	83%	50%	140%
Fluoranthene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	103%	50%	140%	87%	50%	140%	82%	50%	140%
Pyrene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	91%	50%	140%	84%	50%	140%
Benz(a)anthracene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	74%	50%	140%	76%	50%	140%
Chrysene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	93%	50%	140%	77%	50%	140%
Benzo(b)fluoranthene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	75%	50%	140%	77%	50%	140%
Benzo(k)fluoranthene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	76%	50%	140%	73%	50%	140%
Benzo(a)pyrene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	75%	50%	140%	71%	50%	140%
Indeno(1,2,3-cd)pyrene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	114%	50%	140%	89%	50%	140%	80%	50%	140%
Dibenz(a,h)anthracene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	88%	50%	140%	78%	50%	140%
Benzo(g,h,i)perylene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	74%	50%	140%	71%	50%	140%
2-and 1-methyl Naphthalene	1	4112125	< 0.05	< 0.05	0.0%	< 0.05	103%	50%	140%	74%	50%	140%	73%	50%	140%

Certified By: 

AGAT QUALITY ASSURANCE REPORT (V1)

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Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Arsenic	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Barium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	EPA SW 846 6010C; MSA, Part 3, Ch.21	ICP/OES
Cadmium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Copper	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Lead	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Nickel	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Selenium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Silver	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Thallium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Uranium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Zinc	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium VI	INOR-93-6029	SM 3500 B; MSA Part 3, Ch. 25	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE CN-3015 & E 3009 A; SM 4500 CN	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	McKeague 4.12, SM 2510 B	EC METER
Sodium Adsorption Ratio	INOR-93-6007	McKeague 4.12 & 3.26 & EPA SW-846 6010C	ICP/OES
pH, 2:1 CaCl ₂ Extraction	INOR-93-6031	MSA part 3 & SM 4500-H+ B	PH METER



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluorene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Phenanthrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Chrysene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Moisture Content	Org 5506	EPA SW-846 3540 & 8270	BALANCE
Chrysene-d12	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
F1 (C6 to C10)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34)	VOL-91-5009	CCME Tier 1 Method	GC / FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	CCME Tier 1 Method	GC / FID
F4 (C34 to C50)	VOL-91-5009	CCME Tier 1 Method	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	CCME Tier 1 Method	GRAVIMETRIC ANALYSIS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009		GC/FID
Dichlorodifluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Acetone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Benzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 13T685626

PROJECT NO: 13BX001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl Isobutyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromoform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Styrene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS



APPENDIX B

Statement of Limitations



STATEMENT OF LIMITATIONS

This report is prepared for and made available for the sole use of the client named. Peto MacCallum Ltd. (PML) hereby disclaims any liability or responsibility to any person or entity, other than those for whom this report is specifically issued, for any loss, damage, expenses, or penalties that may arise or result from the use of any information or recommendations contained in this report. The contents of this report may not be used or relied upon by any other person without the express written consent and authorization of PML.

This report shall not be relied upon for any purpose other than as agreed with the client named without the written consent of PML. It shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. A portion of this report may not be used as a separate entity: that is to say the report is to be read in its entirety at all times.

The report is based solely on the scope of services which are specifically referred to in this report. No physical or intrusive testing has been performed, except as specifically referenced in this report. This report is not a certification of compliance with past or present regulations, codes, guidelines and policies.

The scope of services carried out by PML is based on details of the proposed development and land use to address certain issues, purposes and objectives with respect to the specific site as identified by the client. Services not expressly set forth in writing are expressly excluded from the services provided by PML. In other words, PML has not performed any observations, investigations, study analysis, engineering evaluation or testing that is not specifically listed in the scope of services in this report. PML assumes no responsibility or duty to the client for any such services and shall not be liable for failing to discover any condition, whose discovery would require the performance of services not specifically referred to in this report.



STATEMENT OF LIMITATIONS (continued)

The findings and comments made by PML in this report are based on the conditions observed at the time of PML's site reconnaissance. No assurances can be made and no assurances are given with respect to any potential changes in site conditions following the time of completion of PML's field work. Furthermore, regulations, codes and guidelines may change at any time subsequent to the date of this report and these changes may effect the validity of the findings and recommendations given in this report.

The results and conclusions with respect to site conditions are therefore in no way intended to be taken as a guarantee or representation, expressed or implied, that the site is free from any contaminants from past or current land use activities or that the conditions in all areas of the site and beneath or within structures are the same as those areas specifically sampled.

Any investigation, examination, measurements or sampling explorations at a particular location may not be representative of conditions between sampled locations. Soil, ground water, surface water, or building material conditions between and beyond the sampled locations may differ from those encountered at the sampling locations and conditions may become apparent during construction which could not be detected or anticipated at the time of the intrusive sampling investigation.

Budget estimates contained in this report are to be viewed as an engineering estimate of probable costs and provided solely for the purposes of assisting the client in its budgeting process. It is understood and agreed that PML will not in any way be held liable as a result of any budget figures provided by it.

The Client expressly waives its right to withhold PML's fees, either in whole or in part, or to make any claim or commence an action or bring any other proceedings, whether in contract, tort, or otherwise against PML in anyway connected with advice or information given by PML relating to the cost estimate or Environmental Remediation/Cleanup and Restoration or Soil and Ground Water Management Plan Cost Estimate.