

Report Number: C17111-10165
 Account Number: 05149

A & L Canada Laboratories Inc.

2136 Jetstream Road, London, Ontario, N5V 3P5
 Telephone: (519) 457-2575 Fax: (519) 457-2664



C17111-10165



To: BIO-CYCLE SOLUTIONS LTD
 P.O. BOX 21
 STATION MAIN
 OKOTOKS, AB T1S 1A4

For: STRATHMORE

866-241-2425

Reported Date: 2017-04-25
 Printed Date: May 1, 2017

COMPOST REPORT

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Sample Number	Lab Number	pH	Lime Index	Available Organic Matter %	Phosphorus P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm
STRATHMORE	71235	5.5	6.0	18.0	1056	2870	2169	9000

Sulfur S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Sodium Na ppm	Nitrate-N NO3-N ppm	Soluble Salt ms/cm	Nitrogen (Total) (%)	Moisture %
10470	33.4	82	427	1.1	6.2	1485	567	8.9	1.27	

INTERPRETATION

CEC		Percent Base Saturation				Proportional Equivalents (meq)				Cation Ratio		C/N Ratio
meq/100g	% BS	% K	% Mg	% Ca	% Na	K	Mg	Ca	Na	Mg/K	Ca/Mg	
79.1	97.0	9.31	22.56	56.92	8.17	7.36	17.84	45.00	6.46	2:1	3:1	
Optimum Range:		3 - 5	8 - 20	60 - 80		0.5 - 1.3				7:1	5:1	

CQA

* Results reported on a dry weight basis.

The results of this report relate to the sample submitted and analyzed.

* Crop yield is influenced by a number of factors in addition to soil fertility.

No guarantee or warranty concerning crop performance is made by A & L.

A&L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.cala.ca
 Additional information available upon request

Results Authorized By:

Ian McLachlin, Vice President

REPORT NO.
C17111-70013

ACCOUNT NUMBER
05149

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TO: BIO-CYCLE SOLUTIONS LTD
P.O. BOX 21
STATION MAIN
OKOTOKS, AB T1S 1A4

FOR: STRATHMORE

ATTN: NEIL WIENS
Phone: 403-803-2549
Fax: 866-241-2425



CERTIFICATE OF ANALYSIS

PAGE: 1 / 3

PROJECT NO:
PO#:
LAB NUMBER: 1117034
SAMPLE ID: STRATHMORE

SAMPLE MATRIX: COMPOST
DATE SAMPLED: 2017-04-19
DATE RECEIVED: 2017-04-21
DATE REPORTED: 2017-04-28
DATE PRINTED: 2017-05-01

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
Arsenic	4.04	ug/g	1.00	EPA 3050/6010 (mod) *
Cadmium	BDL*	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)*
Cobalt	2.94	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Chromium	13.37	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)*
Copper	28.18	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Mercury	BDL*	ug/g	0.10	EPA 7471 *
Molybdenum	1.7	ug/g	1.0	TMECC.04.06;EPA 3050/6010(mod)*
Nickel	7.80	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Lead	12.00	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Selenium	BDL*	ug/g	1.00	EPA 3050/6010 (mod) *
Zinc	99.65	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)

Comment:

Results reported on a dry weight basis

* - accredited test

BDL - Below detectable levels

The results of this report relate to the sample submitted and analyzed.



C17111-70013

Results Authorized By:

Haifeng Song, Ph.D., C.Chem. Lab Director

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CERTIFICATE OF ANALYSIS

PAGE: 2 / 3

PROJECT NO:
PO#:
LAB NUMBER: 1117035
SAMPLE ID: STRATHMORE

SAMPLE MATRIX: COMPOST
DATE SAMPLED: 2017-04-19
DATE RECEIVED: 2017-04-21
DATE REPORTED: 2017-04-28
DATE PRINTED: 2017-05-01

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
E. coli	<3	MPN/g dry	3	TMECC 07.01
Fecal Coliform	<3	MPN/g dry	3	TMECC 07.01
Salmonella spp.	NEGATIVE	P-A/25.0g(ml)	1 CFU	MFLP-75 *
Total FM > 2.8 mm*	BDL*	%	0.01	TMECC 03.08
Total FM > 25 mm	BDL*	pieces/500ml		TMECC 03.08
Total plastics > 2.8 mm*	BDL*	%	0.01	TMECC 03.08
Total sharps > 2.8 mm*	BDL*	pieces/500ml		TMECC 03.08
Total sharps > 12.5 mm	BDL*	pieces/500ml		TMECC 03.08
Total Organic Matter @ 550 deg C	30.03	%	0.10	LOI@550C
Moisture	37.62	%	0.10	TMECC.03.09-A
C:N Ratio	12:1			TMECC.05.02-A
Sieve 2 Inch (% Passing)	100.00	%	0.10	ASTMD422
Sieve 1 Inch (% Passing)	97.00	%	0.10	ASTMD422
Sieve 1/2 Inch (% Passing)	77.10	%	0.10	ASTMD422
Sieve 3/8 Inch (% Passing)	67.80	%	0.01	ASTMD422
Sieve 1/4 Inch (% Passing)	53.70	%	0.10	ASTMD422
Compost Stability Index	8	---		TMECC.05.08-B
Respiration-mgCO ₂ -C/g OM/day	0.80	mgCO ₂ -C/ gOM/day	0.01	TMECC.05.08-B
Respiration - mgCO ₂ -C/g TS/day	0.20	mgCO ₂ -C/gTS/ day	0.01	TMECC.05.08-B

Comment:

Maturity Index: 8 - Inactive, highly matured compost, very well aged, possibly over-aged, like soil; no limitations for usage.

Results reported on a dry weight basis

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BDL - Below detectable levels

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C17111-70013

Results Authorized By:

Haifeng Song, Ph.D., C.Chem. Lab Director

Compost Quality Alliance

Summary of Analysis Report

To: EcoAg Initiatives
 Box 5622
 High River, AB T1V 1M7

Account # 00884
 Report # C17111-10165
 C17111-70013

Attention: Neil Wiens

Sampled Date: 19-Apr-17
 Reported Date: 1-May-17

CQA Product Quality Test Requirements

Sample ID#	Recommended Product Use	pH	Total Organic Matter (550°C)	C:N Ratio	Moisture
Strathmore	Remediation and mulching	5.5	30.0%	12:1	37.6%

General Recommendations

Recommendations for product use are only a suggestion based on the analysis that was performed on this material. The suggested use is meant only as a guide for interpretation on what the best end use may be.

Particle Size	
97% < 1 in	This compost indicates a coarse texture and is primarily suited for remediation and mulching end uses due to the physical and chemical properties.
Heavy Metals	
see comment	The sample “ Strahtmore (April 19, 2017) ” meets the current CCME Category A compost standards for maximum allowable trace metal content in compost.
Microbiology	
E.Coli <3 Fecal <3 Salmonella neg	The results of our testing indicate this sample meets the current CCME compost standards for maximum allowable microbiological levels.
CO₂ Respiration	
0.80 mg CO ₂ -C/g O.M./day	The CO ₂ respiration is 0.80 mg CO ₂ -C/g O.M./day and meets CCME guidelines for a mature compost.
Stability	
8	The Solvita rating of this compost suggests a stable and mature material.
Foreign Matter	
Total BDL Plastics BDL Sharps BDL	This compost meets the CCME Category A compost standard for foreign matter.
Soluble Salts	
8.9 ms/cm	This material has a high base saturation of sodium at 8.17%Na . From a sodium prespective anything above 2% Na could cause plant injury when used as a top dressing or a soil mix. It is safe to use as an agricultural amendment. We recommend blending this material at a minimum of 5-6 parts soil to compost to dilute the sodium concentration.