

Report Number: C17027-10041
 Account Number: 95000

A & L Canada Laboratories Inc.

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



C17027-10041



To: TRANSFORM COMPOST SYSTEMS
 3911 MT LEHMAN RD
 ABBOTSFORD, BC V2T 5W5

For: TRANSFORM WORM CASTINGS

Attn: JOHN PAUL

Reported Date: 2017-02-02
 Printed Date: Feb 8, 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
WORM CASTING!	39255	6.9	6.8	21.8	1125	3428	1116	4728

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 %
257	52.0	17	181	4.7	4.3	592	668	4.5	1.58	

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	
44.2	100.0	19.89	20.77	53.51	5.83	8.79	9.18	23.64	2.57	1:1	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

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REPORT NUMBER: C17027-10041
ACCOUNT NUMBER: 95000

REPORT OF ANALYSIS

TO: TRANSFORM COMPOST SYSTEMS
3911 MT LEHMAN RD
ABBOTSFORD, BC V2T 5W5

RE: TRANSFORM WORM CASTINGS

DATE RECEIVED: 2017-01-27
DATE REPORTED: 2017-02-08
PAGE: 1 / 1

Attn: JOHN PAUL

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
39255	WORM CASTINGS	Nitrogen (Total)	1.6	%	TMECC.04.02-D



C17027-10041

Results Authorized By:

REPORT NO.
C17027-70004

ACCOUNT NUMBER
95000

A & L Canada Laboratories Inc.

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



TO: TRANSFORM COMPOST SYSTEMS
3911 MT LEHMAN RD
ABBOTSFORD, BC V2T 5W5
CANADA
CANADA

FOR: TRANSFORM WORM CASTINGS

ATTN: JOHN PAUL

Phone: 519-457-2575



CERTIFICATE OF ANALYSIS

PAGE: 1 / 3

PROJECT NO:
PO#: JOHN
LAB NUMBER: 277006
SAMPLE ID: TRANSFORM WORM CASTINGS

SAMPLE MATRIX: COMPOST
DATE SAMPLED: 2017-01-26
DATE RECEIVED: 2017-01-27
DATE REPORTED: 2017-02-03
DATE PRINTED: 2017-02-08

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
Arsenic	4.93	ug/g	1.00	EPA 3050/6010 (mod) *
Cadmium	BDL*	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)*
Cobalt	5.50	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)
Chromium	68.25	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)*
Copper	66.05	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)
Mercury	BDL*	ug/g	0.10	EPA 7471 *
Molybdenum	1.5	ug/g	1.0	TMECC.04.06; EPA 3050/6010(mod)*
Nickel	27.09	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)
Lead	15.48	ug/g	1.00	TMECC.04.06; EPA 3050/6010(mod)
Selenium	BDL*	ug/g	1.00	EPA 3050/6010 (mod) *
Zinc	147.00	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.



C17027-70004

Results Authorized By:

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

REPORT NO.
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FOR: TRANSFORM WORM CASTINGS

ATTN: JOHN PAUL

Phone: 519-457-2575



CERTIFICATE OF ANALYSIS

PAGE: 2 / 3

PROJECT NO:
PO#: JOHN
LAB NUMBER: 277007
SAMPLE ID: TRANSFORM WORM CASTINGS

SAMPLE MATRIX: COMPOST
DATE SAMPLED: 2017-01-26
DATE RECEIVED: 2017-01-27
DATE REPORTED: 2017-02-03
DATE PRINTED: 2017-02-08

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 FM > 12.5 mm	BDL*	pieces/500ml		TMECC03.08
Total Organic Matter @ 550 deg C	28.99	%	0.10	LOI@550C
Moisture	46.87	%	0.10	TMECC.03.09-A
C:N Ratio	11:1			TMECC.05.02-A
Sieve 2 Inch (% Passing)	100.00	%	0.10	ASTMD422
Sieve 1 Inch (% Passing)	100.00	%	0.10	ASTMD422
Sieve 1/2 Inch (% Passing)	100.00	%	0.10	ASTMD422
Sieve 3/8 Inch (% Passing)	100.00	%	0.01	ASTMD422
Sieve 1/4 Inch (% Passing)	100.00	%	0.10	ASTMD422
Compost Stability Index	8	---		TMECC.05.08-B
Respiration-mgCO ₂ -C/g OM/day	BDL*	mgCO ₂ -C/ gOM/day	0.01	TMECC.05.08-B
Respiration - mgCO ₂ -C/g TS/day	BDL*	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

* - accredited test

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Results Authorized By:

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

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CERTIFICATE OF ANALYSIS

PAGE: 3 / 3

PROJECT NO:
PO#: JOHN
LAB NUMBER: 277007
SAMPLE ID: TRANSFORM WORM CASTINGS

SAMPLE MATRIX: COMPOST
DATE SAMPLED: 2017-01-26
DATE RECEIVED: 2017-01-27
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DATE PRINTED: 2017-02-08

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
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1. FM (Foreign matter) = glass, metal, plastic
2. Sharps = foreign matter pieces of a size or shape that can cause human or animal injury
3. 8 mesh screen = 2.36mm
4. *2.8mm screen is used since 3.0mm screen does not exist

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C17027-70004

Results Authorized By:

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

Compost Quality Alliance

Summary of Analysis Report

To: Transform Compost Systems
3911 Mt Lehman Rd
Abbotsford, BC V2T 5W5

Account # 95000
Report # C17027-10041
C17027-70004

Attention: John Paul

Sampled Date: 26-Jan-17
Reported Date: 09-Feb-17

CQA Product Quality Test Requirements

Sample ID#	Recommended Product Use	pH	Total Organic Matter (550°C)	C:N Ratio	Moisture
Transform Worm Castings	Soil/agricultural amendment, topdressing	6.9	29.0%	11:1	46.9%

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	
100% < 1/4 in	This compost indicates a fine texture and is primarily suited for soil/agricultural amendments and topdressing end uses due to the physical and chemical properties.
Heavy Metals	
see comment	The sample “ Transform Worm Castings (January 26, 2017) ” meets the current CCME Category A compost standards for maximum allowable trace metal content in compost.
Microbiology	
E.Coli <3	The results of our testing indicate this sample meets the current CCME compost standards for maximum allowable microbiological levels.
Fecal <3	
Salmonella neg	
CO₂ Respiration	
BDL	The CO ₂ respiration is Below Detectable Limits 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	This compost meets the CCME Category A compost standard for foreign matter.
Plastics BDL	
Sharps BDL	
Soluble Salts	
4.5 ms/cm	This material has a high base saturation of sodium at 5.83%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 4-5 parts soil to compost to dilute the sodium concentration.