

Report Number: C17062-10160  
 Account Number: 98043

# A & L Canada Laboratories Inc.

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



C17062-10160



To: ESSEX-WINDSOR SWA  
 360 FAIRVIEW AVE WEST  
 SUITE 211  
 ESSEX, ON N8M 3G4

For: ROW T-15

519-776-6370

Reported Date: 2017-03-10  
 Printed Date: Mar 13, 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
ROW T-15	48183	8.1	6.9	38.0	584	4906	1741	8229

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 %
106	37.3	38	194	2.9	12.5	268	49	2.7	2.20	

### 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	
69.2	100.0	18.18	20.69	59.45	1.68	12.58	14.32	41.15	1.17	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: C17062-10160  
ACCOUNT NUMBER: 98043

## REPORT OF ANALYSIS

TO: ESSEX-WINDSOR SWA  
360 FAIRVIEW AVE WEST  
SUITE 211  
ESSEX, ON N8M 3G4

RE: ROW T-15

DATE RECEIVED: 2017-03-03  
DATE REPORTED: 2017-03-13  
PAGE: 1 / 1

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
48183	ROW T-15	Nitrogen (Total)	2.2	%	TMECC.04.02-D



C17062-10160

Results Authorized By:

REPORT NO.  
C17062-70008

ACCOUNT NUMBER  
98043

# A & L Canada Laboratories Inc.

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



TO:ESSEX-WINDSOR SWA  
360 FAIRVIEW AVE WEST  
SUITE 211  
ESSEX, ON N8M 3G4

FOR:ROW "T-15"

ATTN:RALPH REISER

Phone:800-563-3377  
Fax:519-776-6370



## CERTIFICATE OF ANALYSIS

PAGE: 1 / 2

PROJECT NO:  
PO#:  
LAB NUMBER:627012  
SAMPLE ID:ROW "T-15"

SAMPLE MATRIX:COMPOST  
DATE SAMPLED:2017-02-28  
DATE RECEIVED:2017-03-03  
DATE REPORTED:2017-03-10  
DATE PRINTED:2017-03-13

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
Arsenic	5.30	ug/g	1.00	EPA 3050/6010 (mod) *
Cadmium	BDL*	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)*
Cobalt	2.37	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Chromium	12.92	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)*
Copper	43.08	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Mercury	BDL*	ug/g	0.10	EPA 7471 *
Molybdenum	1.8	ug/g	1.0	TMECC.04.06;EPA 3050/6010(mod)*
Nickel	7.05	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Lead	19.33	ug/g	1.00	TMECC.04.06;EPA 3050/6010(mod)
Selenium	BDL*	ug/g	1.00	EPA 3050/6010 (mod) *
Zinc	122.95	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.



C17062-70008

Results Authorized By:

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

REPORT NO.  
C17062-70008

# A & L Canada Laboratories Inc.



ACCOUNT NUMBER  
98043

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TO:ESSEX-WINDSOR SWA  
360 FAIRVIEW AVE WEST  
SUITE 211  
ESSEX, ON N8M 3G4

FOR:ROW "T-15"

ATTN:RALPH REISER

Phone:800-563-3377  
Fax:519-776-6370



## CERTIFICATE OF ANALYSIS

PAGE: 2 / 2

PROJECT NO:  
PO#:  
LAB NUMBER:627013  
SAMPLE ID:ROW "T-15"

SAMPLE MATRIX:COMPOST  
DATE SAMPLED:2017-02-28  
DATE RECEIVED:2017-03-03  
DATE REPORTED:2017-03-10  
DATE PRINTED:2017-03-13

PARAMETER	RESULT	UNIT	DETECTION LIMIT	METHOD REFERENCE
E. coli	<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	42.87	%	0.10	LOI@550C
Moisture	46.25	%	0.10	TMECC.03.09-A
C:N Ratio	14:1			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)	99.20	%	0.10	ASTMD422
Sieve 3/8 Inch (% Passing)	96.80	%	0.01	ASTMD422
Sieve 1/4 Inch (% Passing)	92.50	%	0.10	ASTMD422
Compost Stability Index	8	---		TMECC.05.08-B
Respiration-mgCO <sub>2</sub> -C/g OM/day	1.10	mgCO <sub>2</sub> -C/ gOM/day	0.01	TMECC.05.08-B
Respiration - mgCO <sub>2</sub> -C/g TS/day	0.50	mgCO <sub>2</sub> -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.

- 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

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.



C17062-70008

Results Authorized By:

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

# Compost Quality Alliance

## Summary of Analysis Report

To: Essex-Windsor Solid Waste Authority  
 360 Fairview Ave - Suite 211  
 Essex, ON N8M 3G4

Account # 98043  
 Report # C17062-10160  
 C17062-70008

Attention: Ralph Reiser

Sampled Date: 28-Feb-17  
 Reported Date: 13-Mar-17

### CQA Product Quality Test Requirements

Sample ID#	Recommended Product Use	pH	Total Organic Matter (550°C)	C:N Ratio	Moisture
ROW "T-15"	Soil/agricultural amendment, topdressing	8.1	42.9%	14:1	46.3%

### 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.

<b>Particle Size</b>	
93% < 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.
<b>Heavy Metals</b>	
see comment	The sample "ROW "T-15" (February 28, 2017)" meets the current CCME <b>Category A</b> and Ontario <b>Category AA</b> compost standards for maximum allowable trace metal content in compost.
<b>Microbiology</b>	
E.Coli <3 Salmonella neg	The results of our testing indicate this sample meets the current CCME and Ontario compost standards for maximum allowable microbiological levels.
<b>CO<sub>2</sub> Respiration</b>	
1.10 mg CO <sub>2</sub> -C/g O.M./day	The CO <sub>2</sub> respiration is 1.10 mg CO <sub>2</sub> -C/g O.M./day and <b>meets</b> CCME guidelines for a mature compost.
<b>Stability</b>	
8	The Solvita rating of this compost suggests a stable and mature material.
<b>Foreign Matter</b>	
Total BDL Plastics BDL Sharps BDL	This compost <b>meets</b> the CCME <b>Category A</b> and Ontario <b>Category AA</b> compost standard for foreign matter.
<b>Soluble Salts</b>	
2.7 ms/cm	This material has a base saturation of sodium at <b>1.68%Na</b> . 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 2-3 parts soil to compost to dilute the sodium concentration.