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Lab # 2816893 **Report of Analysis** Report Number: 18-169-4105

Account: 41274	CHRIS SKELTON PG A1 ORGANICS 16350 WCR 76 EATON CO 80615
Date Sampled:	2018-06-12
Date Received:	2018-06-13
Sample ID:	P3 CONTRACTOR

Robert Ferris
Account Manager
402-829-9871

COMPOST ANALYSIS

		Analysis (as rec'd)	Analysis (dry weight)	Total content, lbs per ton (as rec'd)
NUTRIENTS				
Nitrogen				
Total Nitrogen	%	0.76	1.11	15.2
Organic Nitrogen	%	0.73	1.06	14.5
Ammonium Nitrogen	%	0.005	0.007	0.1
Nitrate Nitrogen	%	0.03	0.04	0.6
Major and Secondary Nutrients				
Phosphorus	%	0.36	0.52	7.2
Phosphorus as P2O5	%	0.82	1.19	16.4
Potassium	%	1.33	1.94	26.6
Potassium as K2O	%	1.60	2.33	32.0
Sulfur	%	0.27	0.39	5.4
Calcium	%	1.66	2.42	33.2
Magnesium	%	0.59	0.86	11.8
Sodium	%	0.260	0.378	5.2
Micronutrients				
Zinc	ppm	149	217	0.3
Iron	ppm	8790	12795	17.6
Manganese	ppm	280	408	0.6
Copper	ppm	46.5	68	----
Boron	ppm	< 100	----	----
OTHER PROPERTIES				
Moisture	%	31.30		
Total Solids	%	68.70		1374.0
Organic Matter	%	16.60	24.16	332.0
Ash	%	51.90	75.55	1038.0
C:N Ratio		11 : 1		
Total Carbon	%	8.20	11.94	
Chloride	%	0.25	0.36	
pH		8.7		
Conductivity 1:5 (Soluble Salts)	mS/cm	5.4		

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Organic Matter %

16.60 As Received
24.16 Dry Weight

Greater than 20% indicates a desirable range for compost on a dry weight basis.

Compost is a significant source of Organic Matter, which is an important supplier of carbon. Organic Matter improves soil and plant efficiency by improving soil physical properties, providing a source of energy to beneficial organisms, and enhancing the reservoir of soil nutrients.

C/N Ratio

10.8:1

20-30 indicates an ideal range for the initial compost process.
10-20 indicates an ideal range for a finished compost.

All organic matter is made up of substantial amounts of carbon with lesser amounts of nitrogen. The balance of these two elements is called the Carbon/Nitrogen Ratio. For the best performance, the compost pile requires the correct proportion of carbon for energy and nitrogen for protein production. If the C:N ratio is too high (excess carbon) decomposition slows down. If the C:N ratio is too low (excess Nitrogen) the compost pile could be difficult to manage.

Moisture %

31.30

<35% = Indicates overly dry compost

>55% = Indicates overly wet compost

Moisture Percent is the measure of water present in the compost and expressed as a percentage of total weight. Moisture present affects handling and transport. Overly dry will be light and dusty while overly wet will be heavy and clumpy. A desirable moisture content of finished compost will range between 40 to 50%.

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Conductivity or Soluble Salts measures the conductance of electrical current in a liquid compost slurry. Excessive soluble salt content in a compost can prevent or delay seed germination and proper root growth. Conductivity analysis is done on a 1:5 basis.

Conductivity 1:5
5.4

Conductivity Level	Interpretation
Greater than 10	Very High nutrient content. Use for Ag Applications
5 - 10	High nutrient content. Use for Ag Applications
3 - 5	Higher than desirable for salt sensitive plants, some loss of vigor
0.6 - 3	Desirable range for most plants
0.3 - 0.6	Ideal range for greenhouse growth media
0.0 - 0.3	Very Low: Indicates very low nutrient status: plants may show deficiencies.

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pH Value

8.7

0 to 14 scale with 6 to 8 as normal pH levels for compost

A pH in the 6 to 8 pH range indicates a more mature compost

pH measures the acidity or alkalinity of the compost, and is a measurement of the hydrogen ion activity of a soil or compost on a logarithmic scale. The pH scale ranges from 0 to 14 and 7 indicates a neutral pH. Growing media with a higher pH or pH greater than 7 can benefit from a compost that has a more acidic pH or pH below 7. This type of application will possibly lower the soil pH making the soil more conducive to plants that thrive in a more acidic soil condition.

Nutrient Index (Ag Index)

6.2

The Nutrient Index normally runs between 1 and 10.

The Nutrient Index is obtained by dividing the total nutrients (N,P,K) by the amount of salt (Sodium and Chloride). The higher the Nutrient Index the less chance of having a toxic buildup of Sodium (salt) in the soil.

AG INDEX CHART

salt injury possible	*use on soils with excellent drainage characteristics, good water quality and low salts*				*you may use on soils with poor drainage, poor water quality, or high salts*					*for all soils*
1	2	3	4	5	6	7	8	9	10	> 10

Nutrients (N+P205+K20)

4.63 Average Nutrient Content Dry Weight <2 = Low, >5 = High

1-1-1.5 Rating As Received

The most commonly used compost data is the amount of Nitrogen, Phosphate, and Potash (abbreviated as N,P,K) present and the information is similar to that found in common fertilizers. If a compost result has the rating 1-2-2 it means that the compost has 1% Nitrogen, 2% Phosphate and 2% Potash. Most compost tests will have a average nutrient level (N+P+K) of < 5%.

A1 Organics
16350 WCR 76, Eaton, CO 80615
PH: (970) 454-3492 FX: (970) 454-3232

2816893-893
Samples: 1 Page: 1/1
Ashlyn Himes
2018 06 13 14:09

Chain-of-Custody

		SAMPLER	Chris Skelton, P.G.	DATE	
PROJECT NAME	A-1 Organics Eaton	SITE ID		TURNAROUND	standard
PROJECT No.		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	A1 Organics	BILL TO COMPANY	A1 Organics		
SEND REPORT TO	Chris Skelton, P.G.	INVOICE ATTN TO	Chris Skelton, P.G.		
ADDRESS	16350 WCR 76	ADDRESS	16350 WCR 76		
CITY / STATE / ZIP	Eaton, CO 80615	CITY / STATE / ZIP	Eaton, CO 80615		
PHONE	970 454-3492	PHONE	970 454-3492		
FAX	970 454-3232	FAX	970 454-3232		
E-MAIL	chrisskelton@a1organics.com	E-MAIL	chrisskelton@a1organics.com		

WORK ORDER #	
PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

Lab ID	Sample ID	Matrix	Sample Date	Sample Time	# Bags	Pres.	QC	Compost Nutrient Analysis
	P3 Contractor	compost	6/12/2018	14:50	1	No		X

2816893

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
		LEVEL II (Standard QC)
Call Chris Skelton (559) 304-6076 if you have questions		LEVEL III (Std QC + forms)
Cooler #		LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Chris Skelton, P.G.	6/12/2018	16:00
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

21.0°