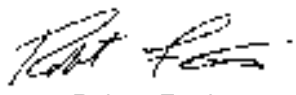


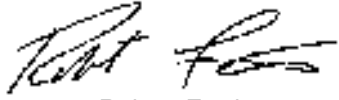


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Lab #	2178583		Report of Analysis		Report Number: 13-261-2183	
Account: 28674	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762			 Robert Ferris Client Service Representative 402-829-9871		
Date Sampled:	4-Sep-13			NUTRIENT ANALYSIS		
Date Received:	5-Sep-13					
Sample ID:	COMPOST					
				Analysis (as rec'd)	Analysis (dry weight)	Total content, lbs per ton (as rec'd)
NUTRIENTS						
Nitrogen						
Total Nitrogen	%	0.38	0.95	7.6		
Organic Nitrogen	%	0.27	0.67	5.4		
Ammonium Nitrogen	%	0.101	0.252	2.0		
Nitrate Nitrogen	%	0.01	0.02	0.2		
Major and Secondary Nutrients						
Phosphorus	%	0.14	0.35	2.8		
Phosphorus as P2O5	%	0.32	0.80	6.4		
Potassium	%	0.23	0.57	4.6		
Potassium as K2O	%	0.28	0.70	5.6		
Sulfur	%	0.08	0.20	1.6		
Calcium	%	0.81	2.02	16.2		
Magnesium	%	0.10	0.25	2.0		
Sodium	%	0.060	0.149	1.2		
Micronutrients						
Zinc	ppm	67	167	0.1		
Iron	ppm	725	1806	1.5		
Manganese	ppm	35	87	----		
Copper	ppm	33	82	----		
Boron	ppm	< 20	----	----		
OTHER PROPERTIES						
Moisture	%	59.86				
Total Solids	%	40.14		802.8		
Organic Matter	%	28.42	70.80	568.4		
Ash	%	11.70	29.15	234.0		
C:N Ratio		41.5:1				
Total Carbon	%	15.78	39.31			
Chloride	%	0.04	0.10			
pH		8.2				
Conductivity 1:5 (Soluble Salts)	mS/cm	3.07				

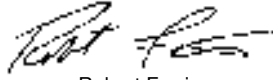


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Lab #	2178583	Additional Metals Report	Report Number: 13-261-2183			
Account: 28674	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871			
Date Sampled:	4-Sep-13		NUTRIENT ANALYSIS			
Date Received:	5-Sep-13					
Sample ID:	COMPOST					
ADDITIONAL METALS						
	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method	Ceiling Conc.* (dry weight)
Arsenic	< 0.5	----	mg/kg	0.5	EPA 6020	75 ppm
Cadmium	< 0.5	----	mg/kg	0.50	EPA 6010	85 ppm
Chromium	3.0	7.5	mg/kg	1.0	EPA 6010	3000 ppm
Lead	< 5	----	mg/kg	5.0	EPA 6010	840 ppm
Mercury	< 0.05	----	mg/kg	0.05	EPA 7471A	57 ppm
Molybdenum	< 1	----	mg/kg	1.0	EPA 6010	75 ppm
Nickel	1.6	4.0	mg/kg	1.0	EPA 6010	420 ppm
Selenium	< 10	----	mg/kg	10.0	EPA 6010	100 ppm
<p>* Reference 40 CFR Table 1 of 503.13 for Ceiling Concentrations. * Sample was prepared for EPA 6010 analysis by EPA Method 3050b.</p>						



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Lab # 2178583		Biological & Physical Properties		Report Number: 13-261-2183							
Account: 28674		MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871							
Date Sampled: Date Received: Sample ID:		4-Sep-13 5-Sep-13 COMPOST									
NUTRIENT ANALYSIS											
<table border="1"> <thead> <tr> <th></th> <th>Analysis (as rec'd)</th> <th>Analysis (dry weight)</th> <th>Units</th> <th>Detection Limit</th> <th>Method</th> </tr> </thead> </table>							Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method
	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method						
Biological Properties											
5 Day Germination 90 % 1 TMECC											
7 Day Vigor 90 % 1 TMECC											
CO ₂ OM Evolution 0.06 mgCO ₂ -C/gOM/day 0.01 TMECC 05.08A											
CO ₂ Solids Evolution 0.07 mgCO ₂ -C/gTS/day 0.01 TMECC 05.08A											
Fecal Coliform 27 mpn/g 2 EPA 1681											
Salmonella n.d. mpn/4g 0.01 EPA 1682											
Stability Rating Stable N/A N/A TMECC 05.08A											
Physical Properties											
Bulk Density (Loose) 809 lbs/cu yard 1 WT/VOL											
Bulk Density (Packed) 1146 lbs/cu yard 1 WT/VOL											
Man Made Materials n.d. % 0.1 Microscopic											
Max. Particle Length 1.3 inches N/A TMECC Sieve											
Sieve % Passing 3" 100 % 0.01 TMECC Sieve											
Sieve % Passing 2" 100 % 0.01 TMECC Sieve											
Sieve % Passing 1.5" 100 % 0.01 TMECC Sieve											
Sieve % Passing 1" 100 % 0.01 TMECC Sieve											
Sieve % Passing 3/4" 100 % 0.01 TMECC Sieve											
Sieve % Passing 5/8" 100 % 0.01 TMECC Sieve											
Sieve % Passing 3/8" 100 % 0.01 TMECC Sieve											
Sieve % Passing 1/4" 94 % 0.01 TMECC Sieve											



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Compost Results Interpretations
Page 1

Report #:

13-261-2183

DATE RECEIVED:

05-Sep-13

Organic Matter %

28.42 As Received

70.80 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

41.5:1

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 %

59.86

<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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Compost Results Interpretations
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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

Conductivity 1:5	
3.1	
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.

Compost Results Interpretations
Page 3

Report #: 13-261-2183
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pH Value
8.2

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)
9.8

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		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)

2.44 Average Nutrient Content Dry Weight
0.5-0.5-0.5 Rating As Received

<2 = Low, >5 = High

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%.