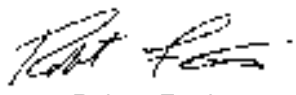


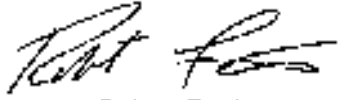


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Lab #	2084797	Report of Analysis		Report Number: 13-021-2091
<b>Account:</b> 28674	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871	
<b>Date Sampled:</b>	9-Jan-13			
<b>Date Received:</b>	10-Jan-13		NUTRIENT ANALYSIS	
<b>Sample ID:</b>	COMPOST			
Total content, lbs per ton (as rec'd)				
Analysis                      Analysis				
(as rec'd)                      (dry weight)				
<b>NUTRIENTS</b>				
Nitrogen				
Total Nitrogen	%	0.70	1.66	14.0
Organic Nitrogen	%	0.59	1.40	11.8
Ammonium Nitrogen	%	0.092	0.218	1.8
Nitrate Nitrogen	%	0.02	0.05	0.4
Major and Secondary Nutrients				
Phosphorus	%	0.23	0.55	4.6
Phosphorus as P2O5	%	0.53	1.26	10.6
Potassium	%	0.54	1.28	10.8
Potassium as K2O	%	0.65	1.54	13.0
Sulfur	%	0.24	0.57	4.8
Calcium	%	1.16	2.75	23.2
Magnesium	%	0.13	0.31	2.6
Sodium	%	0.120	0.285	2.4
Micronutrients				
Zinc	ppm	76	180	0.2
Iron	ppm	713	1693	1.4
Manganese	ppm	58	138	0.1
Copper	ppm	49	116	----
Boron	ppm	< 20	----	----
<b>OTHER PROPERTIES</b>				
Moisture	%	57.88		
Total Solids	%	42.12		842.4
Organic Matter	%	30.30	71.94	606.0
Ash	%	11.90	28.25	238.0
C:N Ratio		23.5:1		
Total Carbon	%	16.45	39.06	
Chloride	%	0.22	0.52	
pH		7.0		
Conductivity 1:5 (Soluble Salts)	mS/cm	8.23		

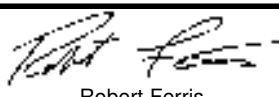


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Lab #	2084797	<b>Additional Metals Report</b>	Report Number: 13-021-2091																																																																									
<b>Account:</b> 28674	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871																																																																									
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<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 #	2084797	<b>Biological &amp; Physical Properties</b>		Report Number: 13-021-2091	
<b>Account:</b> 28674	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871		
<b>Date Sampled:</b>	9-Jan-13	NUTRIENT ANALYSIS			
<b>Date Received:</b>	10-Jan-13				
<b>Sample ID:</b>	COMPOST				
	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method
<b>Biological Properties</b>					
	5 Day Germination	100	%	1	TMECC
	7 Day Vigor	100	%	1	TMECC
	CO <sub>2</sub> OM Evolution	0.09	mgCO <sub>2</sub> -C/gOM/day	0.01	TMECC 05.08A
	CO <sub>2</sub> Solids Evolution	0.18	mgCO <sub>2</sub> -C/gTS/day	0.01	TMECC 05.08A
	Fecal Coliform	n.d.	mpn/g	2	EPA 1681
	Salmonella	n.d.	mpn/4g	0.01	EPA 1682
	Stability Rating	Stable	N/A	N/A	TMECC 05.08A
<b>Physical Properties</b>					
	Bulk Density (Loose)	725	lbs/cu yard	1	WT/VOL
	Bulk Density (Packed)	1163	lbs/cu yard	1	WT/VOL
	Man Made Materials	n.d.	%	0.1	Microscopic
	Max. Particle Length	1.5	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"	98	%	0.01	TMECC Sieve
	Sieve % Passing 1/4"	92	%	0.01	TMECC Sieve



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Compost Results Interpretations  
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Report #:

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DATE RECEIVED:

10-Jan-13

Organic Matter %

30.30 As Received

71.94 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

23.5:1

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 %

57.88

<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

Conductivity 1:5	
8.2	
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

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**pH Value**  
7.0

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)**  
5.5

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)**

4.46 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%.