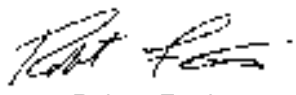


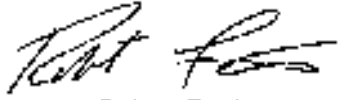


13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121 • www.midwestlabs.com

Lab #	2266844		Report of Analysis		Report Number: 14-139-2155
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:	7-May-14 8-May-14 MONTHLY COMPOST SAMPLE				
					NUTRIENT ANALYSIS
					Total content, lbs per ton (as rec'd)
					Analysis (as rec'd)
					Analysis (dry weight)
NUTRIENTS					
Nitrogen					
Total Nitrogen	%	0.51	1.41	10.2	
Organic Nitrogen	%	0.44	1.21	8.8	
Ammonium Nitrogen	%	0.072	0.199	1.4	
Nitrate Nitrogen	%	< 0.01	----	----	
Major and Secondary Nutrients					
Phosphorus	%	0.14	0.39	2.8	
Phosphorus as P2O5	%	0.32	0.88	6.4	
Potassium	%	0.30	0.83	6.0	
Potassium as K2O	%	0.36	0.99	7.2	
Sulfur	#	none	----	----	
Calcium	%	0.55	1.52	11.0	
Magnesium	%	0.08	0.22	1.6	
Sodium	%	0.050	0.138	1.0	
Micronutrients					
Zinc	ppm	57	157	0.1	
Iron	ppm	402	1109	0.8	
Manganese	ppm	25	69	----	
Copper	ppm	32	88	----	
Boron	ppm	< 20	----	----	
OTHER PROPERTIES					
Moisture	%	63.74			
Total Solids	%	36.26		725.2	
Organic Matter	%	28.60	78.87	572.0	
Ash	%	7.70	21.24	154.0	
C:N Ratio		25.1:1			
Total Carbon	%	12.79	35.27		
Chloride	%	0.08	0.22		
pH		8.5			
Conductivity 1:5 (Soluble Salts)	mS/cm	3.67			

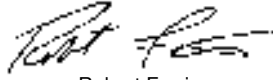


13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121 • www.midwestlabs.com

Lab #	2266844	Additional Metals Report	Report Number: 14-139-2155																																																																									
Account:	MIKE WOLFE C AND C PEAT COMPANY 1650 CR 470 OKAHUMPKA FL 34762		 Robert Ferris Client Service Representative 402-829-9871																																																																									
Date Sampled:	7-May-14		NUTRIENT ANALYSIS																																																																									
Date Received:	8-May-14																																																																											
Sample ID:	MONTHLY COMPOST SAMPLE																																																																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Analysis (as rec'd)</th> <th style="width: 10%;">Analysis (dry weight)</th> <th style="width: 10%;">Units</th> <th style="width: 10%;">Detection Limit</th> <th style="width: 10%;">Method</th> <th style="width: 10%;">Ceiling Conc.* (dry weight)</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: left;">ADDITIONAL METALS</td> </tr> <tr> <td>Arsenic</td> <td>< 0.5</td> <td>----</td> <td>mg/kg</td> <td>0.5</td> <td>EPA 6020</td> <td>75 ppm</td> </tr> <tr> <td>Cadmium</td> <td>< 0.5</td> <td>----</td> <td>mg/kg</td> <td>0.50</td> <td>EPA 6010</td> <td>85 ppm</td> </tr> <tr> <td>Chromium</td> <td>1.3</td> <td>3.6</td> <td>mg/kg</td> <td>1.0</td> <td>EPA 6010</td> <td>3000 ppm</td> </tr> <tr> <td>Lead</td> <td>< 5</td> <td>----</td> <td>mg/kg</td> <td>5.0</td> <td>EPA 6010</td> <td>840 ppm</td> </tr> <tr> <td>Mercury</td> <td>0.08</td> <td>0.22</td> <td>mg/kg</td> <td>0.05</td> <td>EPA 7471A</td> <td>57 ppm</td> </tr> <tr> <td>Molybdenum</td> <td>1.1</td> <td>3.0</td> <td>mg/kg</td> <td>1.0</td> <td>EPA 6010</td> <td>75 ppm</td> </tr> <tr> <td>Nickel</td> <td>< 1</td> <td>----</td> <td>mg/kg</td> <td>1.0</td> <td>EPA 6010</td> <td>420 ppm</td> </tr> <tr> <td>Selenium</td> <td>< 10</td> <td>----</td> <td>mg/kg</td> <td>10.0</td> <td>EPA 6010</td> <td>100 ppm</td> </tr> </tbody> </table>								Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method	Ceiling Conc.* (dry weight)	ADDITIONAL METALS							Arsenic	< 0.5	----	mg/kg	0.5	EPA 6020	75 ppm	Cadmium	< 0.5	----	mg/kg	0.50	EPA 6010	85 ppm	Chromium	1.3	3.6	mg/kg	1.0	EPA 6010	3000 ppm	Lead	< 5	----	mg/kg	5.0	EPA 6010	840 ppm	Mercury	0.08	0.22	mg/kg	0.05	EPA 7471A	57 ppm	Molybdenum	1.1	3.0	mg/kg	1.0	EPA 6010	75 ppm	Nickel	< 1	----	mg/kg	1.0	EPA 6010	420 ppm	Selenium	< 10	----	mg/kg	10.0	EPA 6010	100 ppm
	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method	Ceiling Conc.* (dry weight)																																																																						
ADDITIONAL METALS																																																																												
Arsenic	< 0.5	----	mg/kg	0.5	EPA 6020	75 ppm																																																																						
Cadmium	< 0.5	----	mg/kg	0.50	EPA 6010	85 ppm																																																																						
Chromium	1.3	3.6	mg/kg	1.0	EPA 6010	3000 ppm																																																																						
Lead	< 5	----	mg/kg	5.0	EPA 6010	840 ppm																																																																						
Mercury	0.08	0.22	mg/kg	0.05	EPA 7471A	57 ppm																																																																						
Molybdenum	1.1	3.0	mg/kg	1.0	EPA 6010	75 ppm																																																																						
Nickel	< 1	----	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>																																																																												



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121 • www.midwestlabs.com

Lab #	2266844	Biological & Physical Properties		Report Number: 14-139-2155																																																																																																																																				
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:	7-May-14	NUTRIENT ANALYSIS																																																																																																																																						
Date Received:	8-May-14																																																																																																																																							
Sample ID:	MONTHLY COMPOST SAMPLE																																																																																																																																							
<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> <tbody> <tr> <td colspan="6">Biological Properties</td> </tr> <tr> <td>5 Day Germination</td> <td>95</td> <td></td> <td>%</td> <td>1</td> <td>TMECC</td> </tr> <tr> <td>7 Day Vigor</td> <td>100</td> <td></td> <td>%</td> <td>1</td> <td>TMECC</td> </tr> <tr> <td>CO₂ OM Evolution</td> <td>0.06</td> <td></td> <td>mgCO₂-C/gOM/day</td> <td>0.01</td> <td>TMECC 05.08A</td> </tr> <tr> <td>CO₂ Solids Evolution</td> <td>0.14</td> <td></td> <td>mgCO₂-C/gTS/day</td> <td>0.01</td> <td>TMECC 05.08A</td> </tr> <tr> <td>Fecal Coliform</td> <td></td> <td>n.d.</td> <td>mpn/g</td> <td>2</td> <td>EPA 1681</td> </tr> <tr> <td>Salmonella</td> <td></td> <td>n.d.</td> <td>mpn/4g</td> <td>0.01</td> <td>EPA 1682</td> </tr> <tr> <td>Stability Rating</td> <td>Stable</td> <td></td> <td>N/A</td> <td>N/A</td> <td>TMECC 05.08A</td> </tr> <tr> <td colspan="6">Physical Properties</td> </tr> <tr> <td>Bulk Density (Loose)</td> <td>590</td> <td></td> <td>lbs/cu yard</td> <td>1</td> <td>WT/VOL</td> </tr> <tr> <td>Bulk Density (Packed)</td> <td>1045</td> <td></td> <td>lbs/cu yard</td> <td>1</td> <td>WT/VOL</td> </tr> <tr> <td>Man Made Materials</td> <td></td> <td>n.d.</td> <td>%</td> <td>0.1</td> <td>Microscopic</td> </tr> <tr> <td>Max. Particle Length</td> <td></td> <td>1.3</td> <td>inches</td> <td>N/A</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 3"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 2"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 1.5"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 1"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 3/4"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 5/8"</td> <td></td> <td>100</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 3/8"</td> <td></td> <td>92</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> <tr> <td>Sieve % Passing 1/4"</td> <td></td> <td>77</td> <td>%</td> <td>0.01</td> <td>TMECC Sieve</td> </tr> </tbody> </table>						Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method	Biological Properties						5 Day Germination	95		%	1	TMECC	7 Day Vigor	100		%	1	TMECC	CO ₂ OM Evolution	0.06		mgCO ₂ -C/gOM/day	0.01	TMECC 05.08A	CO ₂ Solids Evolution	0.14		mgCO ₂ -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	Physical Properties						Bulk Density (Loose)	590		lbs/cu yard	1	WT/VOL	Bulk Density (Packed)	1045		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"		92	%	0.01	TMECC Sieve	Sieve % Passing 1/4"		77	%	0.01	TMECC Sieve
	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method																																																																																																																																			
Biological Properties																																																																																																																																								
5 Day Germination	95		%	1	TMECC																																																																																																																																			
7 Day Vigor	100		%	1	TMECC																																																																																																																																			
CO ₂ OM Evolution	0.06		mgCO ₂ -C/gOM/day	0.01	TMECC 05.08A																																																																																																																																			
CO ₂ Solids Evolution	0.14		mgCO ₂ -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																																																																																																																																			
Physical Properties																																																																																																																																								
Bulk Density (Loose)	590		lbs/cu yard	1	WT/VOL																																																																																																																																			
Bulk Density (Packed)	1045		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"		92	%	0.01	TMECC Sieve																																																																																																																																			
Sieve % Passing 1/4"		77	%	0.01	TMECC Sieve																																																																																																																																			



13611 "B" Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121
www.midwestlabs.com

Compost Results Interpretations
Page 1

Report #:

14-139-2155

DATE RECEIVED:

08-May-14

Organic Matter %

28.60 As Received

78.87 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

25.1:1

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 %

63.74

<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%.



13611 "B" Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121
www.midwestlabs.com

Compost Results Interpretations
Page 2

Report #:
DATE RECEIVED:

14-139-2155
08-May-14

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	
3.7	
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 #: 14-139-2155
DATE RECEIVED: 08-May-14

pH Value
8.5

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)
9.2

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	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)

3.28 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%.