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

Report #: 09-253-2193

Report To: MICHAEL LABELLE
PLUSMINERALS INC
PO BOX 723
BAY SPRINGS MS 39422

Lab #: 1620313

Date Reported: 10-Sep-09
Date Received: 3-Sep-09
Date Sampled:
Sample ID: MIGHTY GROW PROCESSED PO
Account #: 22792

ORGANIC FERTILIZER

Organic Solid Report

Parameters	Analysis As Received	Dry Weight	Units	Nutrients Lbs./Ton As Received	Detection Limit
Total Nitrogen (N)	3.49	3.87	%	69.8	0.01
Ammonium Nitrogen (N)	0.118	0.13	%	2.4	0.001
Nitrate Nitrogen (N)	n.d.	n.d.	%	0.0	0.1
Organic Nitrogen (N)	3.36	3.73	%	67.2	Calculated
Phosphorus (P205)	4.87	5.40	%	97.4	0.10
Potassium (K2O)	4.58	5.08	%	91.6	0.10
Sulfur (S)	0.93	1.03	%	18.6	0.05
Calcium (Ca)	3.82	4.24	%	76.4	0.01
Magnesium (Mg)	0.81	0.90	%	16.2	0.01
Sodium (Na)	1.21	1.34	%	24.2	0.01
Copper (Cu)	522.00	579	ppm	1.0	20.0
Iron (Fe)	358.00	397	ppm	0.7	50.0
Manganese (Mn)	312.00	346	ppm	0.6	20.0
Zinc (Zn)	402.00	445.8	ppm	0.8	20.0
Moisture	9.82		%		0.10
Total Solids	90.18		%	1803.6	
Total Salts				13.91	
pH	6.20				
Total Carbon	30.94	34.31	%		0.050
C/N Ratio	8.9:1				
Chloride	1.36	1.51	%		0.02

n.d. = Not Detected

Total salts should not exceed 500 lbs/acre.
Salt contributions from commercial fertilizer applications must also be considered.

Soil test yearly to monitor phosphorus levels, organic matter, pH, and micronutrients.

Matt Stukenholtz

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Compost Results Interpretations

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DATE RECEIVED: 03-Sep-09

Organic Matter %

62.99 As Received
69.85 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

8.9:1

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 %

9.82

<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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pH Value

6.2

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)

5.0

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)

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

3.5-5.4.5 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%.