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Lab # 7048070	4	Report of Analys	is	Report Numb	ber: 24-176-4087
Acco	ınt: Ronnie	Bailey			
74	112 ANRA/	Neches Compost Facilit	y	1/4	0_
	1805 H	му 79 W.		16M	700
	Jacksor	ville TX 75766		Robe	ert Ferris
				Accour	nt Manager
Date Samp	ed: 2024-06	S-11		-	829-9871
Date Receiv		S-12		STA ANALYSIS	3
Sample		PILE #325			
	·				Total content,
			Analysis	Analysis	lbs per ton
			(as rec'd)	(dry weight)	(as rec'd)
NUTRIENTS					
Nitrogen					
	Nitrogen	%	0.86	2.18	17.2
Orga	nic Nitrogen	%	0.70	1.78	14.0
Amm	onium Nitrogen	%	0.098	0.248	2.0
Nitrat	e Nitrogen	%	0.06	0.15	1.2
	d Secondary Nutrie				
Phos	phorus	%	0.31	0.79	6.2
Phos	phorus as P2O5	%	0.71	1.80	14.2
Potas	ssium	%	0.08	0.20	1.6
Potas	ssium as K2O	%	0.10	0.25	2.0
Sulfu	r	%	0.16	0.41	3.2
Calci	um	%	0.48	1.22	9.6
Magr	nesium	%	0.09	0.23	1.8
Sodiu	ım	%	0.040	0.101	0.8
Micronut	rients				
Iron		ppm	5530	14004	11.1
	janese	ppm	90.4	229	0.2
Boroi	ſ	ppm	< 100		
OTUED DOGE	DTIEO				
OTHER PROPE		0/	00.54		
Moist		%	60.51		700.0
	Solids	%	39.49	05.04	789.8
	rganic Matter	%	26.00	65.84	520.0
	sh	%	13.10	33.17	262.0
	Carbon	%	13.55	34.31	
Chlor	ride	%	< 0.01		
pH		0.11.)	4.8		
Cond	uctivity 1:5 (Soluble	e Salts) mS/cm	2.24		

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Date Sampled: 2024-06-11 402-829-9871 Date Received: 2024-06-12 STA ANALYSIS Analysis (as rec'd) (dry weight) Units Detection Limit Method Biological Properties Germination 100 % 1 TMECC 05.05.05.05.05.05.05.05.05.05.05.05.05.0	ANRA/ Neches Compost Facility 1805 Hwy 79 W. Jacksonville TX 75766 2024-06-11 2024-06-12	Robert Ferris Client Service Representative
1805 Hwy 79 W. Jacksonville TX 75766 Robert Ferris Client Service Representative 402-829-9871 STA ANALYSIS Sample ID: STOCKPILE #325 STA ANALYSIS STA A	1805 Hwy 79 W. Jacksonville TX 75766 2024-06-11 2024-06-12	
Jacksonville TX 75766 Robert Ferris	Jacksonville TX 75766 2024-06-11 2024-06-12	
Client Service Representative 402-829-9871 402-829-9871 STA ANALYSIS STA ANALYSIS STA ANALYSIS STA ANALYSIS STOCKPILE #325 STOCKPILE #325 STOCKPILE #325 STOCKPILE #325 STA ANALYSIS STA ANALY	2024-06-11 2024-06-12	
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Biological Properties Germination 100 % 1 TMECC 05.05.05.05.05.05.05.05.05.05.05.05.05.0	STOCKPILE #325	
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Germination 100 % 1 TMECC 05.05. Germination Vigor 95 % 1 TMECC 05.05. CO2 OM Evolution 0.12 mgCO2-C/gOM/day 0.01 TMECC 05.08l CO2 Solids Evolution 0.36 mgCO2-C/gTS/day 0.01 TMECC 05.08l Fecal Coliform 275 mpn/g 0.2 EPA 1681 Salmonella 4 mpn/4g 1.2 TMECC 07.02 Stability Rating Stable N/A N/A TMECC 05.08l	(as rec'd) (dry weight) Uni	its Detection Limit Method
Germination Vigor 95 % 1 TMECC 05.05/ CO2 OM Evolution 0.12 mgCO2-C/gOM/day 0.01 TMECC 05.08/ CO2 Solids Evolution 0.36 mgCO2-C/gTS/day 0.01 TMECC 05.08/ Fecal Coliform 275 mpn/g 0.2 EPA 1681 Salmonella 4 mpn/4g 1.2 TMECC 07.02 Stability Rating Stable N/A N/A TMECC 05.08/		
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Salmonella 4 mpn/4g 1.2 TMECC 07.02 Stability Rating Stable N/A N/A TMECC 05.08	n 0.36 mgCO2	2-C/gTS/day 0.01 TMECC 05.08B
Stability Rating Stable N/A N/A TMECC 05.08	275 mpr	n/g 0.2 EPA 1681
, ,	4 mpn	n/4g 1.2 TMECC 07.02
Physical Properties	Stable N/	'A N/A TMECC 05.08B
Physical Properties		
Bulk Density (Loose) 927 lbs/cu yard 1 WT/VOL	•	3
Bulk Density (Packed) 1062 lbs/cu yard 1 WT/VOL	,	,
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***************************************	
· · · · · · · · · · · · · · · · · · ·		
5		
<u> </u>		
ŭ	5" 100 %	
Sieve % Passing 3/4" 89 % 0.01 TMECC Sieve	100 %	0.01 TMFCC Sieve
	100 % 4" 89 %	
Sieve % Passing 3/8" 73 % 0.01 TMECC Sieve	100 % 4" 89 %	
Sieve % Passing 1/4" 66 % 0.01 TMECC Sieve	100 % 4" 89 % 8" 89 %	6 0.01 TMECC Sieve

Compost Results Interpretations

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Report #:
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Organic Matter %

26.00 As Received 65.84 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

15.8:1

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 %

60.51

<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%.

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 basis.

Conductivity 1:5	
2.2	
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

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pH Value

4.8

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)

>10

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.

				AC	G INDEX CHA	RT				
salt injury possible			t drainage cha lity and low sa		уои і	may use on so qu	ils with poor d ality, or high s		water	for all soils
1	2	3	4	5	6	7	8	9	10	> 10

Nutrients (N+P205+K20)

4.23 Average Nutrient Content Dry Weight

<2 = Low, >5 = High

1-0.5-0 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%.

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Ronnie Bailey **ANRA/ Neches Compost Facility** Jacksonville TX 75766 1805 Hwy 79 W.

REPORT OF ANALYSIS

STA ANALYSIS For: (74112) ANRA/ Neches Compost Facility

Level Fo	ound	_	Reporting		Analyst-	Verified-
As Received	Dry Weight	Units	Limit	Method	Date	Date
Lab Number: 70480704	Date Sa	mpled: 202	1-06-11 083	30		
< 0.50	0.71	mg/kg	0.50	EPA 6010	ras7-2024/06/14 trh1-2024/06/24	trh1-2024/06/24
6.08	15.4	mg/kg	1.00	EPA 6010	ras7-2024/06/14 trh1-2024/06/24	trh1-2024/06/24
< 0.05	< 0.05	mg/kg	0.05	EPA 7471	Mab7-2024/06/19 trh1-2024/06/24	trh1-2024/06/24
< 5.0	10.1	mg/kg	5.0	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
1.7	4.2	mg/kg	1.0	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
3.8	9.7	mg/kg	1.0	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
< 10.0	< 10.0	mg/kg	10.0	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
99.6	252.2	mg/kg	2.0	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
46.6	118	mg/kg	_	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
2.40	6.08	mg/kg	0.5	EPA 6020	nto7-2024/06/17	trh1-2024/06/24
1.01	2.56	mg/kg	1.00	EPA 6010	ras7-2024/06/14	trh1-2024/06/24
	Level F- As Received Lab Number: 70480704 < 0.50 6.08 < 0.05 < 5.0 1.7 3.8 < 10.0 99.6 46.6 2.40 1.01	Dry	Dry	Dry	Found Reporting Dry Weight Units Limit 0.71 mg/kg 0.50 15.4 mg/kg 1.00 < 0.05	Found Reporting Dry Weight Units Limit Method 0.71 mg/kg 0.50 EPA 6010 15.4 mg/kg 1.00 EPA 6010 < 0.05

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REPORT OF ANALYSIS

STA ANALYSIS For: (74112) ANRA/ Neches Compost Facility

Analysis As Received **Level Found** Dry Weight Units Reporting Limit Method Date Analyst-Date Verified-

your state for their requirements. exceeded. Individual states enforce different holding times for compost or biosolids so please contact the regulatory body in EPA 1681 holding time of < 24 hours from sampling to laboratory set up of samples for biosolids and compost has been

ppm = parts per million, ppm = mg/kg, ppm = mg/L

For questions please contact:

Account Manager bjuarez@midwestlabs.com (402)829-9853 Brendan Juarez