Annual Composting Facility Report

July 1st, 2024 (Year) – June 30th, 2025 (Year)
Due July 31st

J. PETTIECORD INC. 77-COM-01-22
NICK WYLIE
1200 PRAIRIE DRIVE SW
BONDURANT IA 50035

Send completed form to:
Theresa.Stiner@dnr.iowa.gov
Land Quality Bureau
c/o Theresa Stiner
6200 Park Ave. Ste 200
Des Moines IA 50321

Please make address corrections as necessary

REGISTERED FACILITIES ONLY: check the box that describes your facility

☒ Yard waste only (vegetative matter such as grass clippings, leaves, garden waste, brush, and trees)

☐ Food residuals singly or in combination with yard waste and/or agricultural waste (includes but is not limited to manure, crop residuals, bedding, and other vegetative by-products produced during farm processing. Dead animals are not included). Food waste and yard waste received from off premises is two tons or less per week. (If food waste and yard waste received from off premises is greater than two tons per week complete the Permitted Facilities section.)

☐ Dead farm animals and bulking agent only. Compost facility owner is owner of at least some of the sites where animals are generated. (If Compost facility owner does not own any of the sites where animals are generated or other materials are also composted complete the Permitted Facilities section.)

PERMITTED FACILITIES ONLY: check types of materials accepted and provide tonnage

☒ Yard Waste	tonnage:	2,451.70
☐ Wood (other than yard waste)	tonnage:	
☐ Agricultural waste	tonnage:	
☐ Animal mortalities	tonnage:	
☐ Sewage Sludge	tonnage:	
☐ Industrial sludge	tonnage:	
☐ Food residuals	tonnage:	
☐ Paper	tonnage:	
☐ Other (specify): _____	tonnage:	

Total tonnage of material composted tonnage: 2,451.70

Total capacity of the facility (maximum tons that can be composted per year): tonnage: 10,000

FINISHED COMPOST MARKETED OR USED. Provide information about the amount of finished compost REMOVED from the Facility for the following uses. If you answer "yes" to any question, please provide tonnage information for this reporting period.

Amount of finished composted REMOVED from the Facility: 1,136.70 Tons/year

Is the finished Compost: (check all that apply)

☒ Sold 1,136.70 tons/year ☐ Given away _____ tons/year

☐ Used by your organization _____ tons/year

Is your product registered with the Iowa Department of Agriculture & Land Stewardship? ☒ Yes ☐ No

Questions? Call or email:
Theresa Stiner, Project Officer, theresa.stiner@dnr.iowa.gov, (515) 721-7979

COMPOST FACILITY OPERATION INFORMATION. In this section provide information as to how the composting facility operates.

What method/s of composting is employed at the facility

- [x] Turned piles/windrows
- [ ] Aerated static piles/windrows
- [ ] Vermicompost
- [ ] In-vessel
- [ ] Other (please describe) _____
- [ ] Facility is enclosed

Has the facility operator taken and passed an approved composting course?

- [x] Yes, has taken and passed a composting operator training course
- [ ] No, has **not** taken a composting operator training course

PERMITTED COMPOSTING FACILITIES ONLY. Each composting facility is required by IAC Chapter 105.9(4) to test its compost to make sure that the concentrations of all metals and fecal coliform or Salmonella sp. do not exceed regulated levels. Please attach a copy of the test results to this form, making sure that the applicable units (reference 105) are clearly recorded. All composting facilities are required to take biweekly temperature readings of compost piles, and weekly readings of moisture levels. Facilities are not required to report these readings on this annual form, but should keep this information on file to be referenced if necessary.

How often is the finished compost product analyzed?

- [ ] Never
- [ ] Monthly
- [ ] Twice a year
- [ ] Annually
- [x] Other (please describe) 4 TIMES PER YEAR

CERTIFICATION

I certify under penalty of law that I am the owner, operator, or authorized representative of the owner or operator and that I have examined and am familiar with the information reported above, and that I believe the information is true, accurate and complete.

Signature: _____ **Date:** 7-15-25

Name & agency of Person Certifying: CALEY PARRISH J. PETTIJOHN, INC

Email: CALEY@J.PETTIJOHN.COM **Phone Number:** (515) 263-8900 **Fax:** _____

Additional Comments:

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Lab # 70656958 **Report of Analysis** Report Number: 25-196-4028

Account: 56344	CALEY PARRISH J. Pettiecord Inc. 1200 Prairie Drive SW Bondurant IA 50035
Date Sampled:	2025-06-30
Date Received:	2025-07-01
Sample ID:	BULK STA COMPOST

Robert Ferris
Account Manager
402-829-9871

STA Compost Project

		Analysis (as rec'd)	Analysis (dry weight)	Total content, lbs per ton (as rec'd)
NUTRIENTS				
Nitrogen				
Total Nitrogen	%	0.59	0.96	11.8
Organic Nitrogen	%	0.59	0.96	11.8
Ammonium Nitrogen	%	< 0.001	----	----
Nitrate Nitrogen	%	< 0.01	----	----
Major and Secondary Nutrients				
Phosphorus	%	0.10	0.16	2.0
Phosphorus as P2O5	%	0.23	0.38	4.6
Potassium	%	0.32	0.52	6.4
Potassium as K2O	%	0.38	0.62	7.6
Sulfur	%	0.07	0.11	1.4
Calcium	%	2.77	4.52	55.4
Magnesium	%	0.29	0.47	5.8
Sodium	%	0.020	0.033	0.4
Micronutrients				
Iron	ppm	6250	10199	12.5
Manganese	ppm	237	387	0.5
Boron	ppm	< 100	----	----
OTHER PROPERTIES				
Moisture	%	38.72		
Total Solids	%	61.28		1225.6
Organic Matter	%	29.20	47.65	584.0
Ash	%	31.60	51.57	632.0
Total Carbon	%	14.18	23.14	
Chloride	%	0.04	0.07	
pH		8.2		
Conductivity 1:5 (Soluble Salts)	mS/cm	1.2		

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Lab # 70656958 **Biological & Physical Properties** Report Number: 25-196-4028

Account: 56344	CALEY PARRISH J. Pettiecord Inc. 1200 Prairie Drive SW Bondurant IA 50035
Date Sampled:	2025-06-30
Date Received:	2025-07-01
Sample ID:	BULK STA COMPOST

Robert Ferris
Client Service Representative
402-829-9871

STA Compost Project

	Analysis (as rec'd)	Analysis (dry weight)	Units	Detection Limit	Method
Biological Properties					
Germination	100		%	1	TMECC 05.05A
Germination Vigor	100		%	1	TMECC 05.05A
CO_2 OM Evolution	0.53		$mgCO_2$-C/gOM/day	0.01	TMECC 05.08B
CO_2 Solids Evolution	0.97		$mgCO_2$-C/gTS/day	0.01	TMECC 05.08B
Salmonella		< 1.2	mpn/4g	1.2	TMECC 07.02
Stability Rating	Stable		N/A	N/A	TMECC 05.08B
Physical Properties					
Bulk Density (Compost)	741		lbs/cu yard	1	TMECC 03.01A
Film Plastics	n.d.		%	0.1	TMECC 03.08
Glass Fragments	n.d.		%	0.1	TMECC 03.08
Hard Plastics	n.d.		%	0.1	TMECC 03.08
Metal Fragment	n.d.		%	0.1	TMECC 03.08
Sharps	absent		---	0.1	TMECC 03.08
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"		96	%	0.01	TMECC Sieve
Sieve % Passing 1/4"		90	%	0.01	TMECC Sieve

Compost Results Interpretations

Page 1

Report #:	25-196-4028
DATE RECEIVED:	2025-07-01

Organic Matter %

29.20 As Received

47.65 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

24:1

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 %

38.72

<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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Report #:	25-196-4028
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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
1.2

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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Report #: 25-196-4028

DATE RECEIVED: 2025-07-01

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)

>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.

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)

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

0.5-0-0.5 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%.

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J. Pettiecord Inc.
CALEY PARRISH
1200 Prairie Drive SW
Bondurant IA 50035

REPORT OF ANALYSIS

For: (56344) J. Pettiecord Inc.
STA Compost Project

Analysis	Level Found As Received	Level Found Dry Weight	Units	Reporting Limit	Method	Analyst-Date	Verified-Date
Sample ID: **BULK STA COMPOST** Lab Number: **70656958** Date Sampled: **2025-06-30 1230**							
Cadmium (total)	< 0.20	< 0.20	mg/kg	0.20	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Chromium (total)	7.41	12.1	mg/kg	1.00	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Mercury (total)	< 0.05	0.06	mg/kg	0.05	EPA 7471	Mab7-2025/07/10	trh1-2025/07/14
Lead (total)	6.1	10.0	mg/kg	5.0	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Molybdenum (total)	< 1.0	1.6	mg/kg	1.0	EPA 6010	erw9-2025/07/11	trh1-2025/07/14
Nickel (total)	7.4	12.0	mg/kg	1.0	EPA 6010	erw9-2025/07/07	trh1-2025/07/14
Selenium (total)	< 10.0	< 10.0	mg/kg	10.0	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Zinc (total)	39.5	64.4	mg/kg	2.0	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Copper (total)	11.6	19.0	mg/kg	1	EPA 6010	erw9-2025/07/03	trh1-2025/07/14
Arsenic (total)	2.50	4.08	mg/kg	0.5	EPA 6020	nto7-2025/07/09	trh1-2025/07/14
Cobalt (total)	2.21	3.60	mg/kg	1.00	EPA 6010	erw9-2025/07/03	trh1-2025/07/14

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For: (56344) J. Pettiecord Inc.
STA Compost Project

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

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

For questions please contact:

Rob Ferris
Account Manager
rferris@midwestlabs.com (402)829-9871