

Report Number: F01346-0152
 Account Number: 26023

A & L GREAT LAKES LABORATORIES, INC.

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To: For: FARMS

Farm: CORSON

Attn: Grower Code:

Date Received: 12/12/2001

Date Reported: 12/14/2001

SOIL TEST REPORT

Page: 1

Sample Number	Lab Number	Organic Matter %	Phosphorus		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	Sodium Na ppm	pH		Cation Exchange Capacity meq/100g	Percent Base Saturation				
			Bray P1 ppm-P	Bray P2 ppm-P					Soil pH	Buffer pH		% K	% Mg	% Ca	% H	% Na
CO S	13879	1.4	96 VH		94 M	95 M	750 M		6.6	6.9	6.0	4.0	13.2	62.7	20.1	
CO N	13880	1.3	69 VH		85 M	105 H	850 H		7.1		5.3	4.1	16.4	79.5		

69 x 2 = 138165/A P₂O₅ ppm

VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH

Sample Number	Sulfur S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Nitrate NO ₃ -N ppm	Ammonium NH ₄ -N ppm	Bicarb-P P ppm	Comments

Samples Analyzed By:

UW Soil & Forage Analysis Lab
8396 Yellowstone Drive
Marshfield, WI 54449
(715) 387-2523

WASTE ANALYSIS REPORT

COOPERATIVE EXTENSION
University of Wisconsin-Extension
University of Wisconsin-Madison
Soils Department, Madison, WI

Number: 2609

Date received: 7/11/

Account: 555492

Client:

County: out-of-state/unknown

Date processed: 7/12/

Send to:

COOPERATIVE EXTENSION SERVICE
315 W GREEN STREET
MARSHALL, MI 49068

Sample Information

Sample Name: NORTH TOP

Material: Dairy

Type of Storage: concrete pit

Storage System: Liquid

Type of Bedding: sand

Laboratory Analysis

Moisture: 62.40%

Dry Matter: 37.60%

Estimated Available Nutrient Credits for Manure:

	<u>Total Nutrients</u> lbs/1000 gal	<u>In 1st Year of Application</u> lbs/1000 gal	<u>If Applied 2 Consecutive Yrs</u> lbs/1000 gal	<u>If Applied 3 Consecutive Yrs</u> lbs/1000 gal
Total Nitrogen (Injected)	39.63	15.85	19.82	21.80
Total Nitrogen (Surface Applied)	39.63	11.89	15.85	17.83
Total Phosphorus as P₂O₅	17.15	10.29	12.01	12.86
Total Potassium as K₂O	29.96	23.97	26.96	28.46
Sulfur	6.87	4.12	4.81	5.15
Estimated Value of Available Nutrients in Surface Applied Manure¹		\$9.04	\$10.82	\$11.71

Additional Tests

NH₄-N: 18.72 lbs/1000 gal

Additional Information

1 Value based on commercial fertilizer costs as of 3/1/2002:

- N (urea) \$0.21/lb
- P₂O₅ (Triple Superphosphate) \$0.24/lb
- K₂O (Potash) \$0.13/lb
- S (Elemental Sulfur) \$0.23/lb

Composting Worksheet for Mortalities	
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Sample Dairy Farm Michigan

	Production Phase		
	Cows	Calves	Heifers
Capacity	450	350	165
Days in this production phase	365	150	168
Number of animals per year	450	852	358
Percent mortality	0.038	0.2	0.005
Average weight of animals during phase, lb.	1400	110	600

Phase - calculated daily mortality (lb/day)	66	51	3
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Total farm mortality daily (lb./day)	120
Desired time to fill primary bin, number of months	2
Total farm mortality per time (lb./day x number of months)	7192
Desired animal tissue density, lb./ft ³	10
Bin volume needed to fill bin in desired time, ft ³	719
Length of bin	10
Width of bin	16
Height of compost material	5
Volume of bin, ft ³	685

Number of months compost occupies primary bin	5
Number of months compost occupies secondary bin	4
Number of composting bins	6
Number of bulking agent storage bins	1

Total number of bins needed in compost facility	7
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Total ft ³	4484
Total tons of compost per year	100
Total lb total nitrogen per year	1993
Total lb P ₂ O ₅ per year	2790
Total lb K ₂ O per year	2690

Table 1. Estimated dimensions of compost bin and amount of animal tissue that may be place in bin if depth is 5 to 6 feet.

Size (L x W)	Mortality capacity, lb.
8 x 8	3200 to 3840
9 x 9	4050 to 4860
9 x 10	4500 to 5400
10 x 10	5000 to 6000
10 x 12	6000 to 7200
10 x 14	7000 to 8400
10 x 16	8000 to 9600
10 x 18	9000 to 10800