

14-023-9265

REPORT DATE  
Jan 23, 2014  
RECEIVED DATE  
Jan 21, 2014

SEND TO  
30582



**Midwest**  
**Laboratories, Inc.**

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

**PAGE 1/1**  
ISSUE DATE  
Jan 23, 2014

**MADDEN AG SERVICES**  
**SCOTT MADDEN**  
**14840 275TH STREET**  
**LONG GROVE IA 52756**

**Nutrient Land Application**  
**For: (30582) MADDEN AG SERVICES**  
**CINNAMON RIDGE DAIRY**  
**MANURE**

Sample ID: FALL 2013 #2 Lab Number: 10078629

Parameter	Analysis	Pounds of Nutrient		Est. First Year Availability	Method	Reviewer-Date
		per 1000 gal	per acre-in			
Ammonium nitrogen (total)	0.12 %	10.1	271	10	AOAC 2001.11	jib4 2014-01-23 14:32:33
Organic nitrogen	0.14 %	11.8	316	4	CALCULATION	Auto 2014-01-23 14:32:33
Total Kjeldahl nitrogen (TKN)	0.26 %	22.0	586	14	AOAC 2001.11	jib4 2014-01-23 14:32:33
Phosphorus (as P2O5)	0.14 %	11.8	316	8	AOAC 985.01 (mod) *	Auto 2014-01-23 14:32:33
Potassium (as K2O)	0.37 %	31.3	834	28	AOAC 985.01 (mod) *	Auto 2014-01-23 14:32:33
Sulfur (total)	0.03 %	2.5	67.6	1	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Calcium (total)	0.26 %	22.0	586	15	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Magnesium (total)	0.12 %	10.1	271	7	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Sodium (total)	0.09 %	7.6	203	5	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Copper (total)	38 ppm	0.32	8.57	0.22	ICAP	jib4 2014-01-23 14:32:33
Iron (total)	520 ppm	4.39	117	3.07	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Manganese (total)	36 ppm	0.30	8.12	0.21	ICAP	jib4 2014-01-23 14:32:33
Zinc (total)	26 ppm	0.22	5.86	0.15	AOAC 985.01 (mod) *	jib4 2014-01-23 14:32:33
Moisture	90.9 %				SM 2540 G 1997	jib4 2014-01-23 14:32:33
Total solids	9.10 %	769			CALCULATION	Auto 2014-01-23 14:32:33
Total salts	0.96 %	81.1	2160		CALCULATION	Auto 2014-01-23 14:32:33
pH	7.7 S.U.				EPA 9045C	jib4 2014-01-23 14:32:33

First year availability of nitrogen is calculated based on pre-plant application with incorporation. Nitrogen available from previous years application not considered. Total manure salts should not exceed 500 lbs/acre. Less than 500 lbs/acre if annual rainfall is less than 25 inches and/or the soil CEC is less than 12 meq/100g. Salt contributions from commercial fertilizer applications must also be considered. Soil test yearly to monitor phosphorus levels, organic matter, pH, and micronutrients. Spring soil test for residual nitrate - make accurate slides; recommendations! Nitrogen availability will vary with methods of application and field conditions. The nitrogen availability values used on a manure management plan must comply with state regulations. These regulations vary from state to state.

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.