



Dairyland Laboratories  
 919 Lincoln Ave.  
 Sauk Rapids, MN 56379  
**Telephone:** 320-240-1737  
**Fax:** 320-240-1838  
**Email:** info@dairylandlabs.com

**Sample Date:** 2023-12-12  
**Sample No.:** 003-2312-1309367

**To:** Steffes Auctioneers  
 24400 MN Hwy 22 South  
 Litchfield, MN 55355

**Account No.:** 953 (0)  
**Sampled By:** Steffes Auctioneers  
**Sampled For:** STEFFES AUCTION

**Product:** 3747

**Test Mode:** N9  
**Feed Type:** Hay - Grass  
**Sub Type:** Mixed

Moisture	14.90%		
Dry Matter	85.10%		
		<b>Dry Basis</b>	<b>90% Range*</b>
Crude Protein	%DM	12.13	4.95 - 16.5
AD-ICP	%DM	1.32	0.62 - 1.79
ND-ICP w/SS	%DM	3.78	1.29 - 4.68
Protein Sol.	%CP	20.69	8.61 - 48.9
Total Amino Acids	%DM	8.04	2.58 - 15.2
Total Amino Acids	%CP	66.28	45.0 - 80.7
Lysine	%CP	3.46	2.37 - 4.60
Methionine	%CP	1.15	0.65 - 1.72
Isoleucine	%CP	3.22	2.08 - 3.75
Leucine	%CP	6.43	4.58 - 7.86
Histidine	%CP	1.32	1.02 - 1.71
ADF	%DM	41.00	31.8 - 50.2
aNDF	%DM	60.72	48.2 - 72.7
aNDFom	%DM	58.14	43.0 - 68.9
Lignin (Sulfuric Acid)	%DM	6.44	3.94 - 9.40
Lignin	%NDFom	11.08	
Lignin input (uNDF/2.4)	%DM	8.85	
NDFD12	%NDFom	19.87	21.4 - 45.1
NDFD 24	%NDFom	37.31	31.1 - 59.0
NDFD 30	%NDFom	41.50	36.2 - 65.5
NDFD 48	%NDFom	49.38	40.6 - 67.4
NDFD240	%NDFom	63.48	52.4 - 80.6
uNDFom12	%DM	46.59	24.8 - 48.5
uNDFom24	%DM	36.45	18.7 - 43.4
uNDFom30	%DM	34.01	14.7 - 40.9
uNDFom48	%DM	29.43	12.8 - 35.9
uNDFom240	%DM	21.23	10.3 - 30.4
Starch	%DM	1.03	0.25 - 7.32
Fat (EE)	%DM	2.30	1.58 - 3.71
TFA (fat)	%DM	0.90	0.49 - 2.17
16:0 Palmitic	%TFA	25.56	18.1 - 36.8
18:0 Stearic	%TFA	6.67	3.37 - 10.8
18:1 Oleic	%TFA	10.00	4.24 - 26.6
18:2 Linoleic	%TFA	13.33	3.64 - 26.4

18:3 Linolenic	%TFA	42.22	8.75 - 59.7
Ash	%DM	8.13	6.12 - 13.0
Calcium	%DM	0.66	0.25 - 1.15
Phosphorus	%DM	0.27	0.11 - 0.35
Magnesium	%DM	0.24	0.12 - 0.33
Potassium	%DM	1.86	0.69 - 3.03
Sulfur	%DM	0.20	0.07 - 0.25
Chloride	%DM	0.33	0.07 - 0.89
Sugar (ESC)	%DM	4.99	2.16 - 10.4
Sugar (WSC)	%DM	6.62	3.29 - 12.9

\*Mixed grass hay statistics provided for comparison.

**Calculations**

Adjusted Crude Protein	%DM	11.96		
NFC	%DM	23.48		
NSC	%DM	7.65		
RFV		87.43		
RFQ		108.10		
NDF kd rate Van Amb	%/hr	2.81		
NDF kd rate MIR_P1	%/hr	3.68		
		<b>ADF</b>	<b>OARDC</b>	<b>MLK 2013</b>
TDN	%DM	56.96	55.89	49.62
Nel 3x	Mcal/cwt	58.05	56.79	57.22
Neg	Mcal/cwt	27.15	28.56	20.20
Nem	Mcal/cwt	52.59	54.12	45.10
Milk per ton	lbs/ton			2258