



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.:** 003-2312-1309370

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

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

**Product:** 3749

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

Moisture	10.55%		
Dry Matter	89.45%		
		<b>Dry Basis</b>	<b>90% Range*</b>
Crude Protein	%DM	16.86	13.7 - 23.9
AD-ICP	%DM	1.83	1.06 - 2.09
ND-ICP w/SS	%DM	2.72	1.47 - 4.24
Protein Sol.	%CP	38.73	26.1 - 46.1
Total Amino Acids	%DM	11.76	6.52 - 15.6
Total Amino Acids	%CP	69.75	64.1 - 79.8
Lysine	%CP	3.74	3.44 - 4.63
Methionine	%CP	1.36	1.35 - 1.74
Isoleucine	%CP	3.26	2.63 - 3.55
Leucine	%CP	6.29	5.08 - 7.24
Histidine	%CP	1.42	1.25 - 1.70
ADF	%DM	43.15	25.8 - 41.6
aNDF	%DM	51.28	32.3 - 55.6
aNDFom	%DM	48.13	29.9 - 53.5
Lignin (Sulfuric Acid)	%DM	10.43	5.44 - 9.38
Lignin	%NDFom	21.67	
Lignin input (uNDF/2.4)	%DM	12.41	
NDFD12	%NDFom	17.20	21.0 - 43.6
NDFD 24	%NDFom	25.45	29.2 - 51.4
NDFD 30	%NDFom	27.51	32.1 - 54.7
NDFD 48	%NDFom	31.19	33.6 - 57.5
NDFD240	%NDFom	38.11	43.0 - 70.7
uNDFom12	%DM	39.85	20.1 - 48.9
uNDFom24	%DM	35.88	17.3 - 31.3
uNDFom30	%DM	34.89	16.4 - 29.7
uNDFom48	%DM	33.12	15.8 - 29.2
uNDFom240	%DM	29.79	12.2 - 28.8
Starch	%DM	1.69	0.29 - 3.75
Fat (EE)	%DM	1.99	1.88 - 3.44
TFA (fat)	%DM	1.07	0.87 - 2.47
16:0 Palmitic	%TFA	21.50	22.7 - 40.0
18:0 Stearic	%TFA	5.61	4.68 - 8.86
18:1 Oleic	%TFA	9.35	3.89 - 11.4
18:2 Linoleic	%TFA	21.50	11.4 - 22.4

18:3 Linolenic	%TFA	40.19	18.8 - 50.4
Ash	%DM	10.72	8.88 - 13.8
Calcium	%DM	1.06	0.93 - 1.81
Phosphorus	%DM	0.28	0.24 - 0.39
Magnesium	%DM	0.25	0.23 - 0.40
Potassium	%DM	2.51	1.76 - 3.37
Sulfur	%DM	0.20	0.16 - 0.33
Chloride	%DM	0.63	0.13 - 1.12
Sugar (ESC)	%DM	5.76	3.04 - 9.57
Sugar (WSC)	%DM	6.90	3.67 - 10.5

\*Mixed hay statistics provided for comparison.

**Calculations**

Adjusted Crude Protein	%DM	16.63		
NFC	%DM	24.94		
NSC	%DM	8.59		
RFV		100.29		
RFQ		69.10		
NDF kd rate Van Amb	%/hr	2.84		
NDF kd rate MIR_P1	%/hr	4.51		
		<b>ADF</b>	<b>OARDC</b>	<b>MLK 2013</b>
TDN	%DM	55.29	50.97	48.04
Nel 3x	Mcal/cwt	56.19	51.31	52.34
Neg	Mcal/cwt	29.11	23.75	20.06
Nem	Mcal/cwt	54.72	48.91	44.95
Milk per ton	lbs/ton			1908