



Dairyland Laboratories  
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**Sample Date:** 2023-12-12  
**Sample No.:** 003-2312-1309374

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

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

**Product:** 3753

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

Moisture	13.43%		
Dry Matter	86.57%		
		<b>Dry Basis</b>	<b>90% Range*</b>
Crude Protein	%DM	13.30	4.95 - 16.5
AD-ICP	%DM	1.09	0.62 - 1.79
ND-ICP w/SS	%DM	3.73	1.29 - 4.68
Protein Sol.	%CP	27.82	8.61 - 48.9
Total Amino Acids	%DM	10.18	2.58 - 15.2
Total Amino Acids	%CP	76.54	45.0 - 80.7
Lysine	%CP	4.36	2.37 - 4.60
Methionine	%CP	1.58	0.65 - 1.72
Isoleucine	%CP	3.46	2.08 - 3.75
Leucine	%CP	6.92	4.58 - 7.86
Histidine	%CP	1.58	1.02 - 1.71
ADF	%DM	35.66	31.8 - 50.2
aNDF	%DM	52.15	48.2 - 72.7
aNDFom	%DM	49.22	43.0 - 68.9
Lignin (Sulfuric Acid)	%DM	4.48	3.94 - 9.40
Lignin	%NDFom	9.10	
Lignin input (uNDF/2.4)	%DM	6.70	
NDFD12	%NDFom	22.96	21.4 - 45.1
NDFD 24	%NDFom	40.23	31.1 - 59.0
NDFD 30	%NDFom	44.56	36.2 - 65.5
NDFD 48	%NDFom	52.62	40.6 - 67.4
NDFD240	%NDFom	67.33	52.4 - 80.6
uNDFom12	%DM	37.92	24.8 - 48.5
uNDFom24	%DM	29.42	18.7 - 43.4
uNDFom30	%DM	27.29	14.7 - 40.9
uNDFom48	%DM	23.32	12.8 - 35.9
uNDFom240	%DM	16.08	10.3 - 30.4
Starch	%DM	2.15	0.25 - 7.32
Fat (EE)	%DM	3.19	1.58 - 3.71
TFA (fat)	%DM	1.46	0.49 - 2.17
16:0 Palmitic	%TFA	18.49	18.1 - 36.8
18:0 Stearic	%TFA	4.11	3.37 - 10.8
18:1 Oleic	%TFA	4.79	4.24 - 26.6
18:2 Linoleic	%TFA	13.01	3.64 - 26.4

18:3 Linolenic	%TFA	57.53	8.75 - 59.7
Ash	%DM	10.70	6.12 - 13.0
Calcium	%DM	0.58	0.25 - 1.15
Phosphorus	%DM	0.30	0.11 - 0.35
Magnesium	%DM	0.25	0.12 - 0.33
Potassium	%DM	2.57	0.69 - 3.03
Sulfur	%DM	0.23	0.07 - 0.25
Chloride	%DM	0.44	0.07 - 0.89
Sugar (ESC)	%DM	11.31	2.16 - 10.4
Sugar (WSC)	%DM	12.33	3.29 - 12.9

\*Mixed grass hay statistics provided for comparison.

**Calculations**

Adjusted Crude Protein	%DM	13.30		
NFC	%DM	28.05		
NSC	%DM	14.48		
RFV		108.97		
RFQ		128.92		
NDF kd rate Van Amb	%/hr	2.87		
NDF kd rate MIR_P1	%/hr	3.77		
		<b>ADF</b>	<b>OARDC</b>	<b>MLK 2013</b>
TDN	%DM	61.12	59.93	54.42
Nel 3x	Mcal/cwt	62.69	61.29	60.88
Neg	Mcal/cwt	31.03	34.55	27.39
Nem	Mcal/cwt	56.81	60.68	52.85
Milk per ton	lbs/ton			2529