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Sample Date: 2023-12-12
Sample No.: 003-2312-1309368

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

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

Product: 3748

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

Moisture	12.18%		
Dry Matter	87.82%		
		Dry Basis	90% Range*
Crude Protein	%DM	16.82	13.7 - 23.9
AD-ICP	%DM	1.31	1.06 - 2.09
ND-ICP w/SS	%DM	2.59	1.47 - 4.24
Protein Sol.	%CP	45.01	26.1 - 46.1
Total Amino Acids	%DM	12.47	6.52 - 15.6
Total Amino Acids	%CP	74.14	64.1 - 79.8
Lysine	%CP	4.16	3.44 - 4.63
Methionine	%CP	1.55	1.35 - 1.74
Isoleucine	%CP	3.33	2.63 - 3.55
Leucine	%CP	6.54	5.08 - 7.24
Histidine	%CP	1.55	1.25 - 1.70
ADF	%DM	36.37	25.8 - 41.6
aNDF	%DM	45.71	32.3 - 55.6
aNDFom	%DM	44.37	29.9 - 53.5
Lignin (Sulfuric Acid)	%DM	7.87	5.44 - 9.38
Lignin	%NDFom	17.74	
Lignin input (uNDF/2.4)	%DM	9.38	
NDFD12	%NDFom	29.10	21.0 - 43.6
NDFD 24	%NDFom	37.57	29.2 - 51.4
NDFD 30	%NDFom	39.60	32.1 - 54.7
NDFD 48	%NDFom	43.05	33.6 - 57.5
NDFD240	%NDFom	49.29	43.0 - 70.7
uNDFom12	%DM	31.46	20.1 - 48.9
uNDFom24	%DM	27.70	17.3 - 31.3
uNDFom30	%DM	26.80	16.4 - 29.7
uNDFom48	%DM	25.27	15.8 - 29.2
uNDFom240	%DM	22.50	12.2 - 28.8
Starch	%DM	0.67	0.29 - 3.75
Fat (EE)	%DM	2.19	1.88 - 3.44
TFA (fat)	%DM	1.16	0.87 - 2.47
16:0 Palmitic	%TFA	22.41	22.7 - 40.0
18:0 Stearic	%TFA	4.31	4.68 - 8.86
18:1 Oleic	%TFA	7.76	3.89 - 11.4
18:2 Linoleic	%TFA	19.83	11.4 - 22.4

18:3 Linolenic	%TFA	43.97	18.8 - 50.4
Ash	%DM	8.45	8.88 - 13.8
Calcium	%DM	1.14	0.93 - 1.81
Phosphorus	%DM	0.30	0.24 - 0.39
Magnesium	%DM	0.25	0.23 - 0.40
Potassium	%DM	2.75	1.76 - 3.37
Sulfur	%DM	0.18	0.16 - 0.33
Chloride	%DM	0.24	0.13 - 1.12
Sugar (ESC)	%DM	9.32	3.04 - 9.57
Sugar (WSC)	%DM	10.26	3.67 - 10.5

*Mixed hay statistics provided for comparison.

Calculations

Adjusted Crude Protein	%DM	16.82		
NFC	%DM	30.79		
NSC	%DM	10.93		
RFV		123.49		
RFQ		115.22		
NDF kd rate Van Amb	%/hr	3.97		
NDF kd rate MIR_P1	%/hr	5.81		
		ADF	OARDC	MLK 2013
TDN	%DM	60.57	58.10	58.45
Nel 3x	Mcal/cwt	62.07	59.25	60.73
Neg	Mcal/cwt	31.53	33.57	34.16
Nem	Mcal/cwt	57.37	59.60	60.25
Milk per ton	lbs/ton			2588