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Sample Date: 2023-12-12
Sample No.: 003-2312-1309375

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

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

Product: 3754

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

Moisture	11.52%		
Dry Matter	88.48%		
		Dry Basis	90% Range*
Crude Protein	%DM	12.69	4.95 - 16.5
AD-ICP	%DM	0.90	0.62 - 1.79
ND-ICP w/SS	%DM	3.87	1.29 - 4.68
Protein Sol.	%CP	27.97	8.61 - 48.9
Total Amino Acids	%DM	9.60	2.58 - 15.2
Total Amino Acids	%CP	75.65	45.0 - 80.7
Lysine	%CP	4.33	2.37 - 4.60
Methionine	%CP	1.50	0.65 - 1.72
Isoleucine	%CP	3.47	2.08 - 3.75
Leucine	%CP	7.01	4.58 - 7.86
Histidine	%CP	1.58	1.02 - 1.71
ADF	%DM	38.08	31.8 - 50.2
aNDF	%DM	55.16	48.2 - 72.7
aNDFom	%DM	52.59	43.0 - 68.9
Lignin (Sulfuric Acid)	%DM	4.39	3.94 - 9.40
Lignin	%NDFom	8.35	
Lignin input (uNDF/2.4)	%DM	6.23	
NDFD12	%NDFom	27.72	21.4 - 45.1
NDFD 24	%NDFom	46.99	31.1 - 59.0
NDFD 30	%NDFom	51.32	36.2 - 65.5
NDFD 48	%NDFom	59.04	40.6 - 67.4
NDFD240	%NDFom	71.59	52.4 - 80.6
uNDFom12	%DM	38.01	24.8 - 48.5
uNDFom24	%DM	27.88	18.7 - 43.4
uNDFom30	%DM	25.60	14.7 - 40.9
uNDFom48	%DM	21.54	12.8 - 35.9
uNDFom240	%DM	14.94	10.3 - 30.4
Starch	%DM	1.11	0.25 - 7.32
Fat (EE)	%DM	2.85	1.58 - 3.71
TFA (fat)	%DM	1.32	0.49 - 2.17
16:0 Palmitic	%TFA	20.45	18.1 - 36.8
18:0 Stearic	%TFA	3.79	3.37 - 10.8
18:1 Oleic	%TFA	6.06	4.24 - 26.6
18:2 Linoleic	%TFA	13.64	3.64 - 26.4

18:3 Linolenic	%TFA	53.79	8.75 - 59.7
Ash	%DM	10.83	6.12 - 13.0
Calcium	%DM	0.46	0.25 - 1.15
Phosphorus	%DM	0.33	0.11 - 0.35
Magnesium	%DM	0.24	0.12 - 0.33
Potassium	%DM	2.74	0.69 - 3.03
Sulfur	%DM	0.22	0.07 - 0.25
Chloride	%DM	0.72	0.07 - 0.89
Sugar (ESC)	%DM	8.06	2.16 - 10.4
Sugar (WSC)	%DM	10.77	3.29 - 12.9

*Mixed grass hay statistics provided for comparison.

Calculations

Adjusted Crude Protein	%DM	12.69		
NFC	%DM	25.44		
NSC	%DM	11.88		
RFV		100.11		
RFQ		127.59		
NDF kd rate Van Amb	%/hr	3.49		
NDF kd rate MIR_P1	%/hr	4.41		
		ADF	OARDC	MLK 2013
TDN	%DM	59.24	59.03	55.60
Nel 3x	Mcal/cwt	60.59	60.28	59.90
Neg	Mcal/cwt	29.61	33.20	28.72
Nem	Mcal/cwt	55.27	59.20	54.30
Milk per ton	lbs/ton			2539