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Sample Date: 2023-12-12
Sample No.: 003-2312-1308947

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

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

Product: 3721

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

Moisture	14.89%		
Dry Matter	85.11%		
		Dry Basis	90% Range*
Crude Protein	%DM	8.26	4.95 - 16.5
AD-ICP	%DM	1.43	0.62 - 1.79
ND-ICP w/SS	%DM	2.22	1.29 - 4.68
Protein Sol.	%CP	23.85	8.61 - 48.9
Total Amino Acids	%DM	7.49	2.58 - 15.2
Total Amino Acids	%CP	90.68	45.0 - 80.7
Lysine	%CP	4.36	2.37 - 4.60
Methionine	%CP	1.69	0.65 - 1.72
Isoleucine	%CP	4.12	2.08 - 3.75
Leucine	%CP	7.87	4.58 - 7.86
Histidine	%CP	1.82	1.02 - 1.71
ADF	%DM	45.21	31.8 - 50.2
aNDF	%DM	61.36	48.2 - 72.7
aNDFom	%DM	57.95	43.0 - 68.9
Lignin (Sulfuric Acid)	%DM	7.86	3.94 - 9.40
Lignin	%NDFom	13.56	
Lignin input (uNDF/2.4)	%DM	11.58	
NDFD12	%NDFom	10.51	21.4 - 45.1
NDFD 24	%NDFom	24.99	31.1 - 59.0
NDFD 30	%NDFom	28.96	36.2 - 65.5
NDFD 48	%NDFom	37.20	40.6 - 67.4
NDFD240	%NDFom	52.06	52.4 - 80.6
uNDFom12	%DM	51.86	24.8 - 48.5
uNDFom24	%DM	43.47	18.7 - 43.4
uNDFom30	%DM	41.17	14.7 - 40.9
uNDFom48	%DM	36.39	12.8 - 35.9
uNDFom240	%DM	27.78	10.3 - 30.4
Starch	%DM	0.89	0.25 - 7.32
Fat (EE)	%DM	2.46	1.58 - 3.71
TFA (fat)	%DM	0.88	0.49 - 2.17
16:0 Palmitic	%TFA	19.32	18.1 - 36.8
18:0 Stearic	%TFA	6.82	3.37 - 10.8
18:1 Oleic	%TFA	12.50	4.24 - 26.6
18:2 Linoleic	%TFA	18.18	3.64 - 26.4

18:3 Linolenic	%TFA	40.91	8.75 - 59.7
Ash	%DM	8.67	6.12 - 13.0
Calcium	%DM	0.81	0.25 - 1.15
Phosphorus	%DM	0.18	0.11 - 0.35
Magnesium	%DM	0.29	0.12 - 0.33
Potassium	%DM	1.94	0.69 - 3.03
Sulfur	%DM	0.18	0.07 - 0.25
Chloride	%DM	0.40	0.07 - 0.89
Sugar (ESC)	%DM	3.04	2.16 - 10.4
Sugar (WSC)	%DM	5.55	3.29 - 12.9

*Mixed grass hay statistics provided for comparison.

Calculations

Adjusted Crude Protein	%DM	7.29		
NFC	%DM	25.46		
NSC	%DM	6.44		
RFV		81.56		
RFQ		81.62		
NDF kd rate Van Amb	%/hr	1.88		
NDF kd rate MIR_P1	%/hr	2.77		
		ADF	OARDC	MLK 2013
TDN	%DM	53.68	52.76	41.54
Nel 3x	Mcal/cwt	54.40	53.30	52.93
Neg	Mcal/cwt	25.59	22.47	6.57
Nem	Mcal/cwt	50.90	47.53	30.65
Milk per ton	lbs/ton			1815