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Sample Date: 2023-12-12
Sample No.: 003-2312-1309373

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

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

Product: 3745

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

Moisture	15.62%		
Dry Matter	84.38%		
		Dry Basis	90% Range*
Crude Protein	%DM	8.83	4.95 - 16.5
AD-ICP	%DM	1.34	0.62 - 1.79
ND-ICP w/SS	%DM	3.63	1.29 - 4.68
Protein Sol.	%CP	17.67	8.61 - 48.9
Total Amino Acids	%DM	7.84	2.58 - 15.2
Total Amino Acids	%CP	88.79	45.0 - 80.7
Lysine	%CP	4.76	2.37 - 4.60
Methionine	%CP	1.81	0.65 - 1.72
Isoleucine	%CP	4.08	2.08 - 3.75
Leucine	%CP	8.15	4.58 - 7.86
Histidine	%CP	1.81	1.02 - 1.71
ADF	%DM	38.76	31.8 - 50.2
aNDF	%DM	53.74	48.2 - 72.7
aNDFom	%DM	51.78	43.0 - 68.9
Lignin (Sulfuric Acid)	%DM	6.29	3.94 - 9.40
Lignin	%NDFom	12.15	
Lignin input (uNDF/2.4)	%DM	8.00	
NDFD12	%NDFom	21.44	21.4 - 45.1
NDFD 24	%NDFom	37.14	31.1 - 59.0
NDFD 30	%NDFom	41.68	36.2 - 65.5
NDFD 48	%NDFom	50.06	40.6 - 67.4
NDFD240	%NDFom	62.94	52.4 - 80.6
uNDFom12	%DM	40.68	24.8 - 48.5
uNDFom24	%DM	32.55	18.7 - 43.4
uNDFom30	%DM	30.20	14.7 - 40.9
uNDFom48	%DM	25.86	12.8 - 35.9
uNDFom240	%DM	19.19	10.3 - 30.4
Starch	%DM	4.36	0.25 - 7.32
Fat (EE)	%DM	2.84	1.58 - 3.71
TFA (fat)	%DM	1.12	0.49 - 2.17
16:0 Palmitic	%TFA	16.96	18.1 - 36.8
18:0 Stearic	%TFA	5.36	3.37 - 10.8
18:1 Oleic	%TFA	10.71	4.24 - 26.6
18:2 Linoleic	%TFA	18.75	3.64 - 26.4

18:3 Linolenic	%TFA	46.43	8.75 - 59.7
Ash	%DM	8.71	6.12 - 13.0
Calcium	%DM	0.81	0.25 - 1.15
Phosphorus	%DM	0.21	0.11 - 0.35
Magnesium	%DM	0.25	0.12 - 0.33
Potassium	%DM	1.59	0.69 - 3.03
Sulfur	%DM	0.11	0.07 - 0.25
Chloride	%DM	0.20	0.07 - 0.89
Sugar (ESC)	%DM	10.42	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	8.10
NFC	%DM	32.19
NSC	%DM	16.69
RFV		101.49
RFQ		117.46
NDF kd rate Van Amb	%/hr	2.92
NDF kd rate MIR_P1	%/hr	3.74

		ADF	OARDC	MLK 2013
TDN	%DM	58.71	57.66	53.16
Nel 3x	Mcal/cwt	60.00	58.76	60.96
Neg	Mcal/cwt	28.89	29.48	23.74
Nem	Mcal/cwt	54.49	55.13	48.90
Milk per ton	lbs/ton			2497