CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

Farm: HUBKA FARMS LTD
Desc: 19A115 MIXED HAY
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: **26611 064**
Sampled: **07/16/2019**
Arrived: **07/18/2019**
Completed: **07/19/2019**
Reported: **07/19/2019**

19A115 MIXED HAY

SAMPLE INFORMATION			
Lab ID:	26611 064	Version:	1.0
Crop Year:	2019	Series:	
Feed Type:	MIXED FORAGE	Cutting#:	1
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	11.4
Dry Matter	88.6

PROTEINS	% SP	% CP	% DM
Crude Protein			9.5
Adjusted Protein			
Soluble Protein		40.3	3.8
Ammonia (CPE)	17.5	7.0	0.67
ADF Protein (ADICP)		10.9	1.04
NDF Protein (NDICP)		19.9	1.90
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.1	6.7
Rumen Deg. CP (Strep.G)			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			65.7	38.3
aNDF		54.8		58.3
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			9.78	5.70
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	57.1	31.3	53.7	31.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	62.2	34.1	58.5	34.1
NDF Digestibility (240 hr)	67.0	36.7	63.0	36.7
uNDF (30 hr)	42.9	23.5	46.3	27.0
uNDF (120 hr)	37.8	20.7	41.5	24.2
uNDF (240 hr)	33.0	18.1	37.0	21.6

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		36.7	8.9
Water Soluble CHO (Sugar)			11.6
Starch		8.1	2.0
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.04
Fatty Acids (%Fat)			40.0
Crude Fat			2.60

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms

MINERALS	
Ash (%DM)	7.07
Calcium (%DM)	0.58
Phosphorus (%DM)	0.20
Magnesium (%DM)	0.20
Potassium (%DM)	1.92
Sulfur (%DM)	0.18
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

QUALITATIVE
Total VFA (%DM)
Lactic Acid (%DM)
Lactic as % of Total VFA
Acetic Acid (%DM)
Butyric Acid (%DM)
1, 2 Propanediol (%DM)

Soil Contamination Probability	Probable low to none
Nitrate Probability	
NIR Statistical Confidence	Excellent prediction potential

ENERGY & INDEX CALCULATIONS	
pH	
TDN (%DM)	59.9
Net Energy Lactation (Mcal/lb)	0.60
Net Energy Maintenance (Mcal/lb)	0.58
Net Energy Gain (Mcal/lb)	0.32
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.77
NDF Dig. Rate (Kd, %HR, uNDF)	5.0
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	94
Relative Forage Quality (RFQ)	124
Milk per Ton (lbs/ton)	2628
Dig. Organic Matter Index (lbs/ton)	1169
Non Fiber Carbohydrates (%DM)	24.40
Non Structural Carbohydrates (%DM)	10.9
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	9.0
Summative Index % (Mass Balance)	

Additional sample information, source and lab pictures