Cumberland Valley Analytical Services

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

Farm: HUBKA FARMS LTD
Desc: 18A515 MIXED HAY
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: **24549 015**
Sampled: **07/18/2018**
Arrived: **07/23/2018**
Completed: **07/24/2018**
Reported: **07/24/2018**

18A515 MIXED HAY

SAMPLE INFORMATION

Lab ID:	24549 015	Version:	1.0
Crop Year:	2018	Series:	
Feed Type:	MIXED FORAGE	Cutting#:	1
Package:	BASIC NIR		

NIR ANALYSIS RESULTS

Moisture	13.5
Dry Matter	86.5

PROTEINS	% SP	% CP	% DM
Crude Protein			10.2
Adjusted Protein			
Soluble Protein		39.8	4.1
Ammonia (CPE)	25.9	10.3	1.05
ADF Protein (ADICP)		13.1	1.33
NDF Protein (NDICP)		31.3	3.19
NDR Protein (NDRCP)			
Rumen Degr. Protein		69.9	7.1
Rumen Deg. CP (Strep.G)			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			70.3	36.2
aNDF		48.9		51.5
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			13.9	7.16
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	49.7	24.3	47.2	24.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	54.0	26.4	51.3	26.4
NDF Digestibility (240 hr)	58.3	28.5	55.3	28.5
uNDF (30 hr)	50.3	24.6	52.9	27.2
uNDF (120 hr)	46.0	22.5	48.7	25.1
uNDF (240 hr)	41.7	20.4	44.7	23.0

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		24.6	7.9
Water Soluble CHO (Sugar)			12.0
Starch		6.4	2.0
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			0.76
Fatty Acids (%Fat)			30.8
Crude Fat			2.47

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms

MINERALS

Ash (%DM)	7.11
Calcium (%DM)	1.18
Phosphorus (%DM)	0.08
Magnesium (%DM)	0.28
Potassium (%DM)	1.34
Sulfur (%DM)	0.19
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)	60.2
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.58
Net Energy Gain (Mcal/lb)	0.32
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.83
NDF Dig. Rate (Kd, %HR, uNDF)	4.9
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	110
Relative Forage Quality (RFQ)	111
Milk per Ton (lbs/ton)	2796
Dig. Organic Matter Index (lbs/ton)	1136
Non Fiber Carbohydrates (%DM)	31.9
Non Structural Carbohydrates (%DM)	9.8
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	9.6
Summative Index % (Mass Balance)	

Additional sample information, source and lab pictures