



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD.
Desc: 221341 1ST CUT MIXED HAY
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 32496 340
Sampled: 08/01/2022
Arrived: 08/05/2022
Completed: 08/08/2022
Reported: 08/08/2022

221341 1ST CUT MIXED HAY

SAMPLE INFORMATION

Lab ID: 32496 340 Version: 1.0
Crop Year: 2022 Series:
Feed Type: MIXED FORAGE Cutting#: 1
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.4
Dry Matter 87.6

PROTEINS

	% SP	% CP	% DM
Crude Protein			13.8
Adjusted Protein			13.8
Soluble Protein		34.1	4.7
Ammonia (CPE)	22.9	7.8	1.08
ADF Protein (ADICP)		12.5	1.72
NDF Protein (NDICP)		39.3	5.43
NDR Protein (NDRCP)			
Rumen Degr. Protein		67.1	9.3
Amino Acid Protein, Total			

FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			64.9	38.8
aNDF		54.7		59.8
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			9.52	5.69
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	54.6	29.9	50.5	30.2
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	59.2	32.4	54.7	32.7
NDF Digestibility (240 hr)	75.1	41.1	69.3	41.4
uNDF (12 hr)				
uNDF (30 hr)	45.4	24.8	49.5	29.6
uNDF (120 hr)	40.8	22.3	45.3	27.1
uNDF (240 hr)	24.9	13.6	30.7	18.4

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		21.5	4.3
Water Soluble CHO (WSC-Sugar)			7.0
Starch		14.3	2.9
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.92
Fatty Acids, Total			0.74
C16:0			0.21
C18:0			0.02
C18:1			0.03
C18:2			0.17
C18:3			0.18
Unsaturated Fatty Acids (RUFAL)			0.38
Fatty Acids (%Fat)			25.3

MINERALS

Ash (%DM)	8.71
Calcium (%DM)	0.72
Phosphorus (%DM)	0.21
Magnesium (%DM)	0.22
Potassium (%DM)	2.19
Sulfur (%DM)	0.27
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

QUALITATIVE

pH
Total VFA (%DM)
Lactic Acid (%DM)
Lactic as % of Total VFA
Acetic Acid (%DM)
Butyric Acid (%DM)
1, 2 Propanediol (%DM)
Nitrate Ion (%DM)
Nitrate-Nitrogen, ppm

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

ENERGY & INDEX CALCULATIONS

TDN (%DM)	57.4
Net Energy Lactation (Mcal/lb)	0.58
Net Energy Maintenance (Mcal/lb)	0.57
Net Energy Gain (Mcal/lb)	0.31
ME (Mcal/lb)	0.96
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.35
NDF Dig. Rate (Kd, %HR, uNDF)	3.8
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	91
Relative Forage Quality (RFQ)	111
Milk per Ton (lbs/ton)	2516
Dig. Organic Matter Index (lbs/ton)	1164
Non Fiber Carbohydrates (%DM)	20.2
Non Structural Carbohydrates, ESC (%DM)	7.2
Non Structural Carbohydrates, WSC (%DM)	9.9
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

Additional sample information, submitted documents and lab pictures linked to QR code



Values in bold were analyzed by wet chemistry methods.



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