



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD  
Desc: 201R61 1ST CUT MIXED HAY  
Submitter: HUBKA, CALE  
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 29849 024  
Sampled: 01/07/2021  
Arrived: 01/11/2021  
Completed: 01/12/2021  
Reported: 01/12/2021

## 201R61 1ST CUT MIXED HAY

### SAMPLE INFORMATION

Lab ID: 29849 024      Version: 1.0  
Crop Year: 2020      Series:  
Feed Type: MIXED FORAGE      Cutting#: 1  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 11.2  
Dry Matter 88.8

### PROTEINS

	% SP	% CP	% DM
Crude Protein			5.8
Adjusted Protein		92.4	5.3
Soluble Protein		41.0	2.4
Ammonia (CPE)	67.4	27.7	1.59
ADF Protein (ADICP)		17.6	1.01
NDF Protein (NDICP)		31.5	1.81
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.5	4.1
Amino Acid Protein, Total			

### FIBER

	% NDF	% DM
ADF	62.4	41.9
aNDF		67.2
aNDFom		65.0
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	9.17	6.16
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

### CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		31.1	6.8
Water Soluble CHO (WSC-Sugar)			11.1
Starch		11.2	2.4
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.25
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

### MINERALS

Ash (%DM)	4.90
Calcium (%DM)	0.42
Phosphorus (%DM)	0.12
Magnesium (%DM)	0.15
Potassium (%DM)	1.01
Sulfur (%DM)	
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  
Nitrate Probability  
NIR Statistical Confidence

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	57.0
Net Energy Lactation (Mcal/lb)	0.58
Net Energy Maintenance (Mcal/lb)	0.56
Net Energy Gain (Mcal/lb)	0.30
ME (Mcal/lb)	0.95
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	4.0
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	78
Relative Forage Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	21.8
Non Structural Carbohydrates (%DM)	9.2
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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