



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** HUBKA FARMS LTD  
**Desc:** 201321 1ST CUT ALFALFA  
**Submitter:** HUBKA, CALE  
**Account:** HUBKA FARMS LTD

**Copies to:** WHITTLE, CHRIS

**Lab ID:** 29175 028  
**Sampled:** 09/11/2020  
**Arrived:** 09/15/2020  
**Completed:** 09/16/2020  
**Reported:** 09/16/2020

## 201321 1ST CUT ALFALFA

### SAMPLE INFORMATION

Lab ID: 29175 028      Version: 1.0  
Crop Year: 2020      Series:  
Feed Type: LEGUME FORAGE      Cutting#: 1  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 12.3  
Dry Matter 87.7

### PROTEINS

	% SP	% CP	% DM
Crude Protein			16.8
Adjusted Protein			
Soluble Protein		31.1	5.2
Ammonia (CPE)	7.1	2.2	0.37
ADF Protein (ADICP)		8.0	1.35
NDF Protein (NDICP)		16.8	2.83
NDR Protein (NDRCP)			
Rumen Degr. Protein		65.5	11.0
Amino Acid Protein, Total			

### FIBER

	%NDFom	NDFom %DM	% NDF	% DM
ADF			78.2	34.0
aNDF		43.0		43.4
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			17.8	7.71
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	41.0	17.6	40.6	17.6
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	45.9	19.7	45.3	19.7
NDF Digestibility (240 hr)	47.9	20.6	47.6	20.6
uNDF (12 hr)				
uNDF (30 hr)	59.0	25.4	59.4	25.8
uNDF (120 hr)	54.2	23.3	54.7	23.7
uNDF (240 hr)	52.1	22.4	52.5	22.8

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		22.9	7.3
Water Soluble CHO (WSC-Sugar)			9.7
Starch		3.7	1.2
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.63
Fatty Acids, Total			1.24
C16:0			0.35
C18:0			0.06
C18:1			0.03
C18:2			0.24
C18:3			0.26
Unsaturated Fatty Acids (RUFAL)			0.53
Fatty Acids (%Fat)			47.2

### MINERALS

Ash (%DM)	8.27
Calcium (%DM)	1.51
Phosphorus (%DM)	0.18
Magnesium (%DM)	0.27
Potassium (%DM)	2.14
Sulfur (%DM)	0.24
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)

Soil Contamination Probability      Probable low to none

Nitrate Probability      Probable low nitrate level

NIR Statistical Confidence      Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	59.5
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.61
Net Energy Gain (Mcal/lb)	0.35
ME (Mcal/lb)	1
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.83
NDF Dig. Rate (Kd, %HR, uNDF)	4.7
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	134
Relative Forage Quality (RFQ)	135
Milk per Ton (lbs/ton)	2779
Dig. Organic Matter Index (lbs/ton)	1165
Non Fiber Carbohydrates (%DM)	31.7
Non Structural Carbohydrates (%DM)	8.5
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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