



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** HUBKA FARMS LTD  
**Desc:** 211321 1ST CUT ALFALFA  
**Submitter:** HUBKA, CALE  
**Account:** HUBKA FARMS LTD

**Copies to:** WHITTLE, CHRIS

**Lab ID:** 30684 384  
**Sampled:** 07/06/2021  
**Arrived:** 07/07/2021  
**Completed:** 07/08/2021  
**Reported:** 07/08/2021

## 211321 1ST CUT ALFALFA

### SAMPLE INFORMATION

Lab ID: 30684 384      Version: 1.0  
Crop Year: 2021      Series:  
Feed Type: LEGUME FORAGE      Cutting#: 1  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 11.2  
Dry Matter 88.8

### PROTEINS

	% SP	% CP	% DM
Crude Protein			19.1
Adjusted Protein			19.1
Soluble Protein		37.6	7.2
Ammonia (CPE)	12.2	4.6	0.87
ADF Protein (ADICP)		6.3	1.20
NDF Protein (NDICP)		15.0	2.86
NDR Protein (NDRCP)			
Rumen Degr. Protein		68.8	13.1
Amino Acid Protein, Total			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			79.8	30.9
aNDF		38.1		38.7
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			18.1	7.02
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	43.8	16.7	43.8	16.9
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	46.4	17.7	46.3	17.9
NDF Digestibility (240 hr)	48.5	18.5	48.3	18.7
uNDF (12 hr)				
uNDF (30 hr)	56.2	21.4	56.2	21.8
uNDF (120 hr)	53.6	20.4	53.7	20.8
uNDF (240 hr)	51.5	19.6	51.7	20.0

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		22.9	7.6
Water Soluble CHO (WSC-Sugar)			9.1
Starch		2.1	0.7
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.64
Fatty Acids, Total			1.37
C16:0			0.36
C18:0			0.06
C18:1			0.02
C18:2			0.25
C18:3			0.48
Unsaturated Fatty Acids (RUFAL)			0.75
Fatty Acids (%Fat)			51.9

### MINERALS

Ash (%DM)	9.41
Calcium (%DM)	1.39
Phosphorus (%DM)	0.25
Magnesium (%DM)	0.27
Potassium (%DM)	2.59
Sulfur (%DM)	0.30
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      Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	61.1
Net Energy Lactation (Mcal/lb)	0.62
Net Energy Maintenance (Mcal/lb)	0.64
Net Energy Gain (Mcal/lb)	0.37
ME (Mcal/lb)	1.03
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.54
NDF Dig. Rate (Kd, %HR, uNDF)	5.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	156
Relative Forage Quality (RFQ)	156
Milk per Ton (lbs/ton)	2960
Dig. Organic Matter Index (lbs/ton)	1229
Non Fiber Carbohydrates (%DM)	33.0
Non Structural Carbohydrates, ESC (%DM)	8.3
Non Structural Carbohydrates, WSC (%DM)	9.8
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.



Cumberland Valley Analytical Services, Inc.

4999 Zane A. Miller Drive, Waynesboro, PA 17268  
www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB

