



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD.  
Desc: 223321 3RD CUT ALFALFA  
Submitter: HUBKA, CALE  
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 32935 172  
Sampled: 10/27/2022  
Arrived: 10/28/2022  
Completed: 10/31/2022  
Reported: 10/31/2022

## 223321 3RD CUT ALFALFA

### SAMPLE INFORMATION

Lab ID: 32935 172      Version: 1.0  
Crop Year:                      Series:  
Feed Type: LEGUME FORAGE      Cutting#:  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 11.6  
Dry Matter 88.4

### PROTEINS

	% SP	% CP	% DM
Crude Protein			18.1
Adjusted Protein			18.1
Soluble Protein		39.3	7.1
Ammonia (CPE)	10.0	3.9	0.71
ADF Protein (ADICP)		8.0	1.44
NDF Protein (NDICP)		13.8	2.50
NDR Protein (NDRCP)			
Rumen Degr. Protein		69.7	12.6
Amino Acid Protein, Total			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			81.5	31.1
aNDF		37.6		38.2
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			18.6	7.09
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	43.3	16.3	43.2	16.5
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	47.0	17.7	46.7	17.8
NDF Digestibility (240 hr)	51.3	19.3	51.0	19.4
uNDF (12 hr)				
uNDF (30 hr)	56.7	21.3	56.8	21.7
uNDF (120 hr)	53.0	19.9	53.3	20.3
uNDF (240 hr)	48.7	18.3	49.1	18.7

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		29.4	10.3
Water Soluble CHO (WSC-Sugar)			11.3
Starch		6.1	2.2
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.26
Fatty Acids, Total			1.40
C16:0			0.34
C18:0			0.06
C18:1			0.03
C18:2			0.27
C18:3			0.45
Unsaturated Fatty Acids (RUFAL)			0.75
Fatty Acids (%Fat)			62.0

### MINERALS

Ash (%DM)	9.02
Calcium (%DM)	1.27
Phosphorus (%DM)	0.22
Magnesium (%DM)	0.23
Potassium (%DM)	2.71
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)

Nitrate-Nitrogen, ppm

Soil Contamination Probability      Probable low to none

NIR Statistical Confidence      Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	60.7
Net Energy Lactation (Mcal/lb)	0.62
Net Energy Maintenance (Mcal/lb)	0.63
Net Energy Gain (Mcal/lb)	0.36
ME (Mcal/lb)	1.02
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.59
NDF Dig. Rate (Kd, %HR, uNDF)	4.7
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	158
Relative Forage Quality (RFQ)	156
Milk per Ton (lbs/ton)	2958
Dig. Organic Matter Index (lbs/ton)	1231
Non Fiber Carbohydrates (%DM)	35.0
Non Structural Carbohydrates, ESC (%DM)	12.5
Non Structural Carbohydrates, WSC (%DM)	13.5
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.



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