



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** HUBKA FARMS  
**Desc:** 201K241 1ST CUT ALFALA  
**Submitter:** HUBKA, CALE  
**Account:** HUBKA FARMS LTD

**Copies to:** WHITTLE, CHRIS

**Lab ID:** 28775 048  
**Sampled:** 07/07/2020  
**Arrived:** 07/09/2020  
**Completed:** 07/10/2020  
**Reported:** 07/10/2020

## 201K241 1ST CUT ALFALA

### SAMPLE INFORMATION

Lab ID:	28775 048	Version:	1.0
Crop Year:	2020	Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	1
Package:	BASIC NIR		

### NIR ANALYSIS RESULTS

Moisture	14.3
Dry Matter	85.7

### PROTEINS

	% SP	% CP	% DM
Crude Protein			15.0
Adjusted Protein			
Soluble Protein		40.9	6.1
Ammonia (CPE)	14.0	5.7	0.86
ADF Protein (ADICP)		7.5	1.12
NDF Protein (NDICP)		9.7	1.46
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.5	10.6
Amino Acid Protein, Total			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			71.9	32.5
aNDF		43.4		45.2
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			16.9	7.62
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	48.6	21.1	46.7	21.1
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	56.0	24.3	53.7	24.3
NDF Digestibility (240 hr)	58.3	25.3	56.0	25.3
uNDF (12 hr)				
uNDF (30 hr)	51.4	22.3	53.3	24.1
uNDF (120 hr)	44.0	19.1	46.3	20.9
uNDF (240 hr)	41.7	18.1	44.0	19.9

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		19.2	6.2
Water Soluble CHO (WSC-Sugar)			9.9
Starch		11.6	3.7
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.47
Fatty Acids, Total			1.28
C16:0			0.29
C18:0			0.05
C18:1			0.02
C18:2			0.24
C18:3			0.37
Unsaturated Fatty Acids (RUFAL)			0.63
Fatty Acids (%Fat)			51.8

### MINERALS

Ash (%DM)	6.64
Calcium (%DM)	1.13
Phosphorus (%DM)	0.20
Magnesium (%DM)	0.21
Potassium (%DM)	1.88
Sulfur (%DM)	0.22
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	Good prediction potential

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	60.2
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.62
Net Energy Gain (Mcal/lb)	0.36
ME (Mcal/lb)	1.01
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.65
NDF Dig. Rate (Kd, %HR, uNDF)	4.6
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	131
Relative Forage Quality (RFQ)	149
Milk per Ton (lbs/ton)	2895
Dig. Organic Matter Index (lbs/ton)	1218
Non Fiber Carbohydrates (%DM)	32.20
Non Structural Carbohydrates (%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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