



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** HUBKA FARMS LTD.  
**Desc:** 222S322 2ND CUT TIMOTHY  
**Submitter:** HUBKA, CALE  
**Account:** HUBKA FARMS LTD

**Copies to:** WHITTLE, CHRIS

**Lab ID:** 32935 180  
**Sampled:** 10/27/2022  
**Arrived:** 10/28/2022  
**Completed:** 10/31/2022  
**Reported:** 10/31/2022

## 222S322 2ND CUT TIMOTHY

### SAMPLE INFORMATION

Lab ID: 32935 180      Version: 1.0  
Crop Year:                      Series:  
Feed Type: GRASS FORAGE      Cutting#:  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 11.0  
Dry Matter 89.0

### PROTEINS

	% SP	% CP	% DM
Crude Protein			10.6
Adjusted Protein			10.6
Soluble Protein		32.9	3.5
Ammonia (CPE)	27.2	9.0	0.95
ADF Protein (ADICP)		10.5	1.11
NDF Protein (NDICP)		29.0	3.08
NDR Protein (NDRCP)			
Rumen Degr. Protein		66.4	7.1
Amino Acid Protein, Total			

### FIBER

	% NDF	% DM
ADF	63.2	38.7
aNDF		61.1
aNDFom		58.3
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	9.32	5.70
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)		43.2	9.5
Water Soluble CHO (WSC-Sugar)			11.9
Starch	9.6	2.1	
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.78
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

### MINERALS

Ash (%DM)	6.56
Calcium (%DM)	0.41
Phosphorus (%DM)	0.21
Magnesium (%DM)	0.19
Potassium (%DM)	1.57
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  
NIR Statistical Confidence

### ENERGY & INDEX CALCULATIONS

TDN (%DM)	58.9
Net Energy Lactation (Mcal/lb)	0.60
Net Energy Maintenance (Mcal/lb)	0.59
Net Energy Gain (Mcal/lb)	0.33
ME (Mcal/lb)	0.98
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	4.4
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	90
Relative Forage Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	22.0
Non Structural Carbohydrates, ESC (%DM)	11.6
Non Structural Carbohydrates, WSC (%DM)	14.0
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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