



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** HFL  
**Desc:** 181K241 ALFALFA  
**Submitter:** HUBKA, CALE  
**Account:** HUBKA FARMS LTD

**Copies to:** WHITTLE, CHRIS

**Lab ID:** 24508 047  
**Sampled:** 07/12/2018  
**Arrived:** 07/17/2018  
**Completed:** 07/18/2018  
**Reported:** 07/18/2018

## 181K241 ALFALFA

### SAMPLE INFORMATION

Lab ID: 24508 047      Version: 1.0  
Crop Year: 2018      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			10.7
Adjusted Protein			
Soluble Protein		53.7	5.7
Ammonia (CPE)	25.4	13.7	1.46
ADF Protein (ADICP)		11.1	1.19
NDF Protein (NDICP)		14.5	1.55
NDR Protein (NDRCP)			
Rumen Degr. Protein		76.8	8.2
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			86.4	36.1
aNDF		40.1		41.8
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			21.8	9.09
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	33.4	13.4	32.0	13.4
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	38.4	15.4	36.8	15.4
NDF Digestibility (240 hr)	40.4	16.2	38.8	16.2
uNDF (30 hr)	66.6	26.7	68.0	28.4
uNDF (120 hr)	61.6	24.7	63.2	26.4
uNDF (240 hr)	59.6	23.9	61.2	25.6

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		19.0	7.6
Water Soluble CHO (Sugar)			10.2
Starch		7.3	2.9
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			0.90
Fatty Acids (%Fat)			37.3
Crude Fat			2.41

### MINERALS

Ash (%DM)	6.87
Calcium (%DM)	1.73
Phosphorus (%DM)	0.10
Magnesium (%DM)	0.28
Potassium (%DM)	0.69
Sulfur (%DM)	0.15
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

### QUALITATIVE

Total VFA (%DM)	
Lactic Acid (%DM)	
Lactic as % of Total VFA	
Acetic Acid (%DM)	
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	
Soil Contamination Probability	Probable low to none
Nitrate Probability	
NIR Statistical Confidence	Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

pH	
TDN (%DM)	60.6
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.59
Net Energy Gain (Mcal/lb)	0.33
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.48
NDF Dig. Rate (Kd, %HR, uNDF)	4.1
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	135
Relative Forage Quality (RFQ)	112
Milk per Ton (lbs/ton)	2739
Dig. Organic Matter Index (lbs/ton)	1136
Non Fiber Carbohydrates (%DM)	39.8
Non Structural Carbohydrates (%DM)	10.5
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	10.7
Summative Index % (Mass Balance)	
Additional sample information, source and lab pictures	



Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms



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