



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** MHR  
**Desc:** MH2-51 ALFALFA  
**Submitter:** BROOK, ADEN  
**Account:** AGRI SALES USA, INC.

**Copies to:**

**Lab ID:** 22457 006  
**Sampled:**  
**Arrived:** 07/26/2017  
**Completed:** 07/26/2017  
**Reported:** 10/08/2017

## MH2-51 ALFALFA

### SAMPLE INFORMATION

Lab ID: 22457 006      Version: 1.0  
Crop Year: 2017      Series:  
Feed Type: LEGUME FORAGE      Cutting#: 2  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 9.6  
Dry Matter 90.4

### PROTEINS

	% SP	% CP	% DM
Crude Protein			22.0
Adjusted Protein			
Soluble Protein		45.0	9.9
Ammonia (CPE)	18.1	8.2	1.79
ADF Protein (ADICP)		6.0	1.31
NDF Protein (NDICP)		9.5	2.09
NDR Protein (NDRCP)			
Rumen Degr. Protein		72.5	15.9
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			83.5	29.5
aNDF		33.9		35.3
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			18.7	6.60
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	45.4	15.4	43.5	15.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	49.6	16.8	47.6	16.8
NDF Digestibility (240 hr)	52.2	17.7	50.2	17.7
uNDF (30 hr)	54.6	18.5	56.5	19.9
uNDF (120 hr)	50.4	17.1	52.4	18.5
uNDF (240 hr)	47.8	16.2	49.8	17.6

### CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		19.4	6.1
Water Soluble CHO (Sugar)			
Starch		7.4	2.3
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.23
Fatty Acids (%Fat)			46.1
Crude Fat			2.67

### MINERALS

Ash (%DM)	11.0
Calcium (%DM)	1.71
Phosphorus (%DM)	0.29
Magnesium (%DM)	0.35
Potassium (%DM)	2.25
Sulfur (%DM)	0.33
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      Probable moderate nitrate level  
NIR Statistical Confidence      Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

pH	
TDN (%DM)	62.6
Net Energy Lactation (Mcal/lb)	0.63
Net Energy Maintenance (Mcal/lb)	0.62
Net Energy Gain (Mcal/lb)	0.36
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.71
NDF Dig. Rate (Kd, %HR, uNDF)	5.77
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	174
Relative Feed Quality (RFQ)	159
Milk per Ton (lbs/ton)	2936
Dig. Organic Matter Index (lbs/ton)	1249
Non Fiber Carbohydrates (%DM)	31.2
Non Structural Carbohydrates (%DM)	8.4
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	7.3
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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