



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** BROOK, ADEN  
**Desc:** ORCHARD GRASS 3 - 3X4 MF DRY  
**Submitter:** BROOK, ADEN  
**Account:** AGRI SALES USA, INC.

**Copies to:**

**Lab ID:** 22853 118  
**Sampled:**  
**Arrived:** 10/03/2017  
**Completed:** 10/03/2017  
**Reported:** 10/08/2017

## ORCHARD GRASS 3 - 3X4 MF DRY

### SAMPLE INFORMATION

Lab ID: 22853 118      Version: 1.0  
Crop Year: 2017      Series:  
Feed Type: ORCHARD GRASS      Cutting#: 3  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 14.5  
Dry Matter 85.5

### PROTEINS

	% SP	% CP	% DM
Crude Protein			14.9
Adjusted Protein		98.4	14.6
Soluble Protein		29.8	4.4
Ammonia (CPE)			
ADF Protein (ADICP)		11.6	1.72
NDF Protein (NDICP)		43.5	6.47
NDR Protein (NDRCP)			
Rumen Degr. Protein		64.9	9.6
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDF	% DM
ADF	58.4	37.6
aNDF		64.4
aNDFom		59.8
NDR (NDF w/o sulfite)		
peNDF		
Crude Fiber		
Lignin	6.97	4.49
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (48 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

### CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (Sugar)		12.6	1.8
Water Soluble CHO (Sugar)			
Starch		13.0	1.8
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			
Fatty Acids (%Fat)			
Crude Fat			3.81

### MINERALS

Ash (%DM)	9.45
Calcium (%DM)	0.57
Phosphorus (%DM)	0.34
Magnesium (%DM)	0.29
Potassium (%DM)	3.41
Sulfur (%DM)	0.30
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

### ENERGY & INDEX CALCULATIONS

pH	
TDN (%DM)	61.0
Net Energy Lactation (Mcal/lb)	0.62
Net Energy Maintenance (Mcal/lb)	0.60
Net Energy Gain (Mcal/lb)	0.34
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	86
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	14.0
Non Structural Carbohydrates (%DM)	3.6
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	
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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