



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** BROOK, ADEN  
**Desc:** #1 TIMOTHY 2 STRING PST1  
**Submitter:** BROOK, ADEN  
**Account:** AGRI SALES USA, INC.

**Copies to:**

**Lab ID:** 20734 115  
**Sampled:**  
**Arrived:** 09/28/2016  
**Completed:** 09/28/2016  
**Reported:** 10/07/2016

## #1 TIMOTHY 2 STRING PST1

### SAMPLE INFORMATION

Lab ID: 20734 115      Version: 3.0  
Crop Year: 2016      Series:  
Feed Type: TIMOTHY FORAGE      Cutting#: 1  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 10.5  
Dry Matter 89.5

### PROTEINS

	% SP	% CP	% DM
Crude Protein			9.8
Adjusted Protein			
Soluble Protein		39.9	3.9
Ammonia (CPE)	37.4	14.9	1.46
ADF Protein (ADICP)		9.3	0.91
NDF Protein (NDICP)		15.6	1.52
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.0	6.8
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			61.0	38.1
aNDF		61.2		62.4
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			9.79	6.11
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	51.2	31.3	50.1	31.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	58.7	35.9	57.5	35.9
NDF Digestibility (240 hr)	61.8	37.8	60.5	37.8
uNDF (30 hr)	48.8	29.9	49.9	31.1
uNDF (120 hr)	41.3	25.3	42.5	26.5
uNDF (240 hr)	38.2	23.4	39.5	24.6

### CARBOHYDRATES

	% Starch	% NFC	% DM
<b>Ethanol Soluble CHO (Sugar)</b>		<b>47.8</b>	<b>10.6</b>
Water Soluble CHO (Sugar)			
<b>Starch</b>		<b>11.4</b>	<b>2.5</b>
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.47
Fatty Acids (%Fat)			50.3
Crude Fat			2.92

### MINERALS

Ash (%DM)	4.28
Calcium (%DM)	0.47
Phosphorus (%DM)	0.25
Magnesium (%DM)	0.16
Potassium (%DM)	1.46
Sulfur (%DM)	0.16
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)  
Titratable Acidity (meq/100gm)

Soil Contamination Probability Probable low to none  
Nitrate Probability Probable low nitrate level  
NIR Statistical Confidence Excellent prediction potential

### ENERGY & INDEX CALCULATIONS

pH	
TDN (%DM)	61.1
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)	3.36
NDF Dig. Rate (Kd, %HR, uNDF)	4.49
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	88
Relative Feed Quality (RFQ)	135
Milk per Ton (lbs/ton)	2792
Dig. Organic Matter Index (lbs/ton)	1157
Non Fiber Carbohydrates (%DM)	22.2
Non Structural Carbohydrates (%DM)	13.1
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	10.3
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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www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB





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Additional Memo

Water Soluble Carbohydrates = 12.72% of DM

Selenium = <0.02 ppm



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