



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** ADEN BROOK FARMS  
**Desc:** TIMOTHY 1ST CUT W1A  
**Submitter:** BROOK, ADEN  
**Account:** AGRI SALES USA, INC.

**Copies to:**

**Lab ID:** 21165 069  
**Sampled:**  
**Arrived:** 12/12/2016  
**Completed:** 12/16/2016  
**Reported:** 12/16/2016

## TIMOTHY 1ST CUT W1A

### SAMPLE INFORMATION

Lab ID: 21165 069 Version: 1.0  
Crop Year: 2016 Series:  
Feed Type: ORCHARD GRASS Cutting#: 1  
Package: NIR Wet Minerals

### NIR ANALYSIS RESULTS

Moisture 9.0  
Dry Matter 91.0

### PROTEINS

	% SP	% CP	% DM
Crude Protein			8.5
Adjusted Protein			
Soluble Protein		36.1	3.1
Ammonia (CPE)	78.4	28.3	2.40
ADF Protein (ADICP)		11.2	0.95
NDF Protein (NDICP)		17.6	1.49
NDR Protein (NDRCP)			
Rumen Degr. Protein		68.0	5.8
Rumen Deg. CP (Strep.G)			

### FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			67.4	39.6
aNDF		56.5		58.8
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			9.39	5.52
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	52.4	29.6	50.3	29.6
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	63.8	36.0	61.2	36.0
NDF Digestibility (240 hr)	67.1	37.9	64.4	37.9
uNDF (30 hr)	47.6	26.9	49.7	29.2
uNDF (120 hr)	36.2	20.5	38.8	22.8
uNDF (240 hr)	32.9	18.6	35.6	20.9

### CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (Sugar)		43.1	11.0
Water Soluble CHO (Sugar)			14.1
Starch		14.3	3.7
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.11
Fatty Acids (%Fat)			43.7
Crude Fat			2.54

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms



### MINERALS

Ash (%DM)	6.07
<b>Calcium (%DM)</b>	<b>0.28</b>
<b>Phosphorus (%DM)</b>	<b>0.18</b>
<b>Magnesium (%DM)</b>	<b>0.16</b>
<b>Potassium (%DM)</b>	<b>1.56</b>
Sulfur (%DM)	0.15
<b>Sodium (%DM)</b>	<b>0.02</b>
Chloride (%DM)	
<b>Iron (PPM)</b>	<b>66</b>
<b>Manganese (PPM)</b>	<b>74</b>
<b>Zinc (PPM)</b>	<b>27</b>
<b>Copper (PPM)</b>	<b>6</b>
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	
Equine TDN (%DM)	47.97
Equine DE (mcal/lb)	0.96
Net Energy Lactation (mcal/lb)	0.61
Net Energy Maintenance (mcal/lb)	0.41
Net Energy Gain (mcal/lb)	0.16
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.31
NDF Dig. Rate (Kd, %HR, uNDF)	4.80
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	92
Relative Feed Quality (RFQ)	125
Milk per Ton (lbs/ton)	2750
Dig. Organic Matter Index (lbs/ton)	1177
Non Fiber Carbohydrates (%DM)	25.6
Non Structural Carbohydrates (%DM)	14.7
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	8.7
Summative Index % (Mass Balance)	
Additional sample information, source and lab pictures	



Powered by Cumberland Valley Analytical Services



14515 Industry Drive, Hagerstown, MD 21742  
www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB





# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

**Farm:** ADEN BROOK FARMS  
**Desc:** TIMOTHY 1ST CUT W1A  
**Submitter:** BROOK, ADEN  
**Account:** AGRI SALES USA, INC.

**Copies to:**

**Lab ID:** 21165 069  
**Sampled:**  
**Arrived:** 12/12/2016  
**Completed:** 12/16/2016  
**Reported:** 12/16/2016

Additional Memo

Water Soluble Carbohydrate = 17.0% of DM



Powered by Cumberland Valley Analytical Services



14515 Industry Drive, Hagerstown, MD 21742  
www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB

