Cumberland Valley Analytical Services

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

Farm: V1-NS
Desc: ALFALFA 1 N SHED WEST
Submitter: BROOK, ADEN
Account: AGRI SALES USA, INC.

Copies to:

Lab ID: **22369 142**
Sampled:
Arrived: **07/11/2017**
Completed: **07/11/2017**
Reported: **07/26/2017**

ALFALFA 1 N SHED WEST

SAMPLE INFORMATION

Lab ID:	22369 142	Version:	1.0
Crop Year:	2017	Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	1
Package:	BASIC NIR		

NIR ANALYSIS RESULTS

Moisture	8.7
Dry Matter	91.3

PROTEINS	% SP	% CP	% DM
Crude Protein			21.7
Adjusted Protein			
Soluble Protein		43.5	9.4
Ammonia (CPE)	8.8	3.8	0.83
ADF Protein (ADICP)		6.4	1.38
NDF Protein (NDICP)		10.1	2.19
NDR Protein (NDRCP)			
Rumen Degr. Protein		71.7	15.5
Rumen Deg. CP (Strep.G)			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			85.6	27.0
aNDF		31.0		31.6
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			20.1	6.35
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	42.3	13.1	41.6	13.1
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	48.8	15.1	47.8	15.1
NDF Digestibility (240 hr)	51.3	15.9	50.4	15.9
uNDF (30 hr)	57.7	17.9	58.4	18.5
uNDF (120 hr)	51.2	15.9	52.2	16.5
uNDF (240 hr)	48.7	15.1	49.6	15.7

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		25.8	9.2
Water Soluble CHO (Sugar)			
Starch		6.6	2.4
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Fatty Acids, Total			1.38
Fatty Acids (%Fat)			50.5
Crude Fat			2.73

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms

MINERALS

Ash (%DM)	10.5
Calcium (%DM)	1.60
Phosphorus (%DM)	0.24
Magnesium (%DM)	0.28
Potassium (%DM)	2.56
Sulfur (%DM)	0.28
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 low nitrate level
NIR Statistical Confidence	Excellent prediction potential

ENERGY & INDEX CALCULATIONS

pH	
TDN (%DM)	64.8
Net Energy Lactation (Mcal/lb)	0.66
Net Energy Maintenance (Mcal/lb)	0.65
Net Energy Gain (Mcal/lb)	0.38
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.89
NDF Dig. Rate (Kd, %HR, uNDF)	7.95
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	200
Relative Feed Quality (RFQ)	190
Milk per Ton (lbs/ton)	3124
Dig. Organic Matter Index (lbs/ton)	1297
Non Fiber Carbohydrates (%DM)	35.7
Non Structural Carbohydrates (%DM)	11.6
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	6.5
Summative Index % (Mass Balance)	

Additional sample information, source and lab pictures