



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DEVRY FORAGES**
Desc: **#666 Submitter:**
CVAS, ANALYSIS
Account: **CVAS ANALYSIS**

Copies to: **NEELS, PETE**
DE KOK, MAKAYLA

Lab ID: **34470 235**
Sampled: **11/15/2023**
Arrived: **11/16/2023**
Completed: **11/16/2023**
Reported: **11/16/2023**

#666

SAMPLE INFORMATION

Lab ID: 34470 235 Version: 1.0
Crop Year: Series:
Feed Type: **LEGUME FORAGE** Cutting#:
Package: **BASIC NIR**

NIR ANALYSIS RESULTS

Moisture 11.4
Dry Matter 88.6

PROTEINS

	% SP	% CP	% DM
Crude Protein			20.9
Adjusted Protein			20.9
Soluble Protein		46.2	9.7
Ammonia (CPE)	9.2	4.3	0.89
ADF Protein (ADICP)		5.1	1.07
NDF Protein (NDICP)		7.8	1.63
NDR Protein (NDRCP)			
Rumen Degr. Protein		73.1	15.3
Amino Acid Protein, Total			

FIBER

	%NDFom	NDFom %DM	% NDF	% DM
ADF			84.9	29.9
aNDF		34.7		35.2
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			18.3	6.44
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	41.1	14.3	40.9	14.4
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	43.4	15.1	43.0	15.1
NDF Digestibility (240 hr)	45.1	15.7	44.9	15.8
uNDF (12 hr)				
uNDF (30 hr)	58.9	20.5	59.1	20.8
uNDF (120 hr)	56.6	19.7	57.0	20.0
uNDF (240 hr)	54.9	19.1	55.1	19.4

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		24.6	8.5
Water Soluble CHO (WSC-Sugar)			10.8
Starch		3.1	1.1
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.52
Fatty Acids, Total			1.41
C16:0			0.39
C18:0			0.06
C18:1			0.02
C18:2			0.24
C18:3			0.43
Unsaturated Fatty Acids (RUFAL)			0.69
Fatty Acids (%Fat)			56.0

MINERALS

Ash (%DM)	8.35
Calcium (%DM)	1.51
Phosphorus (%DM)	0.22
Magnesium (%DM)	0.32
Potassium (%DM)	2.12
Sulfur (%DM)	0.31
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

QUALITATIVE

pH
Total VFA (%DM)
Lactic Acid (%DM)
Lactic as % of Total VFA
Acetic Acid (%DM)
Butyric Acid (%DM)
1, 2 Propanediol (%DM)
Nitrate Ion (%DM)
Nitrate-Nitrogen, ppm

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

ENERGY & INDEX CALCULATIONS

TDN (%DM)	63.6
Net Energy Lactation (Mcal/lb)	0.65
Net Energy Lactation NASEM (Mcal/lb)	0.72
Net Energy Maintenance (Mcal/lb)	0.68
Net Energy Gain (Mcal/lb)	0.41
ME (Mcal/lb)	1.08
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.04
NDF Dig. Rate (Kd, %HR, uNDF)	5.2
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	173
Relative Forage Quality (RFQ)	170
Milk per Ton (lbs/ton)	3084
Dig. Organic Matter Index (lbs/ton)	1262
ROM (Residual Organic Matter)	33.00
NFC (Non-Fiber Carbohydrates)(%DM)	34.7
NSC (Non-Structural Carbohydrates) ESC (%DM)	9.6
NSC (Non-Structural Carbohydrates) WSC (%DM)	11.9
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

Additional sample information, submitted documents and lab pictures linked to QR code



Values in bold were analyzed by wet chemistry methods.

