



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DEVRY FORAGES**
Desc: **#645 3RD CUT 160 BALES**
Submitter: **CVAS, ANALYSIS**
Account: **CVAS ANALYSIS**

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

Lab ID: **34268 263**
Sampled: **09/26/2023**
Arrived: **09/27/2023**
Completed: **09/28/2023**
Reported: **09/28/2023**

#645 3RD CUT 160 BALES

SAMPLE INFORMATION

Lab ID: 34268 263 Version: 1.0
Crop Year: Series:
Feed Type: LEGUME FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 8.4
Dry Matter 91.6

PROTEINS

	% SP	% CP	% DM
Crude Protein			19.6
Adjusted Protein			19.6
Soluble Protein		47.9	9.4
Ammonia (CPE)	10.1	4.8	0.95
ADF Protein (ADICP)		6.8	1.33
NDF Protein (NDICP)		7.9	1.55
NDR Protein (NDRCP)			
Rumen Degr. Protein		74.0	14.5
Amino Acid Protein, Total			

FIBER

	%NDFom	NDFom %DM	% NDF	% DM
ADF			84.6	30.7
aNDF		35.7		36.3
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			17.8	6.44
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	41.9	15.0	41.9	15.2
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	44.2	15.8	44.1	16.0
NDF Digestibility (240 hr)	46.1	16.5	46.0	16.7
uNDF (12 hr)				
uNDF (30 hr)	58.1	20.7	58.1	21.1
uNDF (120 hr)	55.9	19.9	55.9	20.3
uNDF (240 hr)	53.9	19.2	54.0	19.6

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		24.4	8.2
Water Soluble CHO (WSC-Sugar)			10.4
Starch		5.6	1.9
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.46
Fatty Acids, Total			1.37
C16:0			0.37
C18:0			0.06
C18:1			0.04
C18:2			0.25
C18:3			0.41
Unsaturated Fatty Acids (RUFAL)			0.70
Fatty Acids (%Fat)			55.7

Values in bold were analyzed by wet chemistry methods.

MINERALS

Ash (%DM)	9.53
Calcium (%DM)	1.59
Phosphorus (%DM)	0.28
Magnesium (%DM)	0.38
Potassium (%DM)	2.53
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)	61.7
Net Energy Lactation (Mcal/lb)	0.63
Net Energy Lactation NASEM (Mcal/lb)	0.72
Net Energy Maintenance (Mcal/lb)	0.65
Net Energy Gain (Mcal/lb)	0.38
ME (Mcal/lb)	1.04
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.06
NDF Dig. Rate (Kd, %HR, uNDF)	5.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	167
Relative Forage Quality (RFQ)	162
Milk per Ton (lbs/ton)	2947
Dig. Organic Matter Index (lbs/ton)	1277
ROM (Residual Organic Matter)	31.42
NFC (Non-Fiber Carbohydrates)(%DM)	33.7
NSC (Non-Structural Carbohydrates) ESC (%DM)	10.1
NSC (Non-Structural Carbohydrates) WSC (%DM)	12.3
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

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

