CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: DEVRY FORAGES
Desc: #697 1ST CUT RNDS 273 BALES
Submitter: CVAS, ANALYSIS
Account: CVAS ANALYSIS

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Lab ID: **35077 252**
Sampled: **07/16/2024**
Arrived: **07/17/2024**
Completed: **07/17/2024**
Reported: **07/17/2024**

#697 1ST CUT RNDS 273 BALES

SAMPLE INFORMATION			
Lab ID:	35077 252	Version:	1.0
Crop Year:		Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	13.3
Dry Matter	86.7

PROTEINS	% SP	% CP	% DM
Crude Protein			15.8
Adjusted Protein			15.8
Soluble Protein		46.2	7.3
Ammonia (CPE)	15.5	7.1	1.13
ADF Protein (ADICP)		8.0	1.26
NDF Protein (NDICP)		8.7	1.38
NDR Protein (NDRCP)			
Rumen Degr. Protein		73.1	11.6
Amino Acid Protein, Total			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			80.7	36.3
aNDF		44.3		45.0
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			18.4	8.26
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	31.0	13.8	31.1	14.0
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	34.4	15.3	34.5	15.5
NDF Digestibility (240 hr)	36.0	16.0	36.0	16.2
uNDF (12 hr)				
uNDF (30 hr)	69.0	30.6	68.9	31.0
uNDF (120 hr)	65.6	29.1	65.5	29.5
uNDF (240 hr)	64.0	28.4	64.0	28.8

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		27.2	8.5
Water Soluble CHO (WSC-Sugar)			11.2
Starch		1.6	0.5
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.39
Fatty Acids, Total			1.19
C16:0			0.31
C18:0			0.05
C18:1			0.02
C18:2			0.21
C18:3			0.31
Unsaturated Fatty Acids (RUFAL)			0.54
Fatty Acids (%Fat)			49.8

Values in bold were analyzed by wet chemistry methods.

MINERALS	
Ash (%DM)	6.85
Calcium (%DM)	1.51
Phosphorus (%DM)	0.14
Magnesium (%DM)	0.37
Potassium (%DM)	0.96
Sulfur (%DM)	0.23
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)	59.0
Net Energy Lactation (Mcal/lb)	0.60
Net Energy Maintenance (Mcal/lb)	0.60
Net Energy Gain (Mcal/lb)	0.34
ME (Mcal/lb)	0.99
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	2.61
NDF Dig. Rate (Kd, %HR, uNDF)	4.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	125
Relative Forage Quality (RFQ)	102
Milk per Ton (lbs/ton)	2531
Beef per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	1086
ROM (Residual Organic Matter)	30.88
NFC (Non-Fiber Carbohydrates)(%DM)	31.4
NSC (Non-Structural Carbohydrates) ESC (%DM)	9.0
NSC (Non-Structural Carbohydrates) WSC (%DM)	11.7
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

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