



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **US-1250705**
Desc: **HAY-1ST CUT TOA**
Submitter: **MAD BARN INC., .**
Account: **MAD BARN INC.**

Copies to: **DEFOREST, JOLI**

Lab ID: **38943 177**
Sampled:
Arrived: **05/01/2026**
Completed: **05/01/2026**
Reported: **05/01/2026**

HAY-1ST CUT TOA

SAMPLE INFORMATION

Lab ID: 38943 177 Version: 1.0
Feed Type: MIXED FORAGE Crop Year: 2026
Package: NIR Wet Minerals Cutting#: 1

NIR ANALYSIS RESULTS

Moisture 10.5
Dry Matter 89.5

PROTEINS

	% SP	% CP	% DM
Crude Protein			13.9
Adjusted Protein			13.9
Soluble Protein		44.0	6.1
Ammonia (CPE)	40.4	17.8	2.48
ADF Protein (ADICP)		12.1	1.69
NDF Protein (NDICP)		17.9	2.50
NDR Protein (NDRCP)			
Rumen Degr. Protein		72.0	10.0
Amino Acid Protein, Total		57.4	8.00
Lysine			
Methionine			
Isoleucine			
Leucine			
Histidine			
Valine			
Arginine			

FIBER

	% NDF	% DM
ADF	75.5	46.7
aNDF		61.9
aNDFom		56.8
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	14.9	9.23
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (12 hr)		
uNDF (24 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Fat	% Starch	% NFC	% DM
ESC, Sugar			13.3	2.3
WSC, Sugar				4.5
Starch			10.9	1.9
Soluble Starch				
Soluble Fiber				
Starch Dig. (7 hr, 4 mm)				
Crude Fat				1.21
Fatty Acids, Total				
C16:0				
C18:0				
C18:1				
C18:2				
C18:3				

Unsaturated Fatty Acids

Values in bold were analyzed by wet chemistry methods.

MINERALS

Ash (%DM) 8.48
Calcium (%DM) 0.79
Phosphorus (%DM) 0.40
Magnesium (%DM) 0.21
Potassium (%DM) 2.25
Sulfur (%DM) 0.13
Sodium (%DM) 0.07
Chloride (%DM)
Iron (PPM) 145
Manganese (PPM) 20
Zinc (PPM) 24
Copper (PPM) 10
Molybdenum (PPM)

QUALITATIVE

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

Soil Contamination Probability
Soil Contamination (%DM)
NIR Statistical Confidence

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM) 40.5
Equine DE (Mcal/lb) 0.81
Net Energy Lactation (Mcal/lb) 0.49
Net Energy Maintenance (Mcal/lb) 0.40
Net Energy Gain (Mcal/lb) 0.16
ME (Mcal/lb) 0.79
AA Protein as % of Total Protein 57.4
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)
NDF Dig. Rate (Kd, %HR, uNDF) 3.7
Starch Dig. Rate (Kd, %HR, Mertens)
Relative Feed Value (RFV) 79
Relative Forage Quality (RFQ)
Milk per Ton (lbs/ton)
Milk per Ton 2024(lbs/ton)
Beef per Ton (lbs/ton)
Dig. Organic Matter Index (lbs/ton)
NFC (Non-Fiber Carbohydrates)(%DM) 17.0
NSC (Non-Structural Carbohydrates) ESC (%DM) 4.2
NSC (Non-Structural Carbohydrates) WSC (%DM) 6.4
DCAD (meq/100gdm)
Summative Index % (Mass Balance)

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



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