



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **HICKS HAY LLC**
Desc: **1ST CUTTING GRASS**
Submitter: **HICKS, PETER**
Account: **HICKS HAY CO.**

Copies to:

Lab ID: **31950 205**
Sampled: **04/01/2022**
Arrived: **04/04/2022**
Completed: **04/04/2022**
Reported: **04/04/2022**

1ST CUTTING GRASS

SAMPLE INFORMATION

Lab ID: 31950 205 Version: 1.0
Crop Year: 2021 Series:
Feed Type: GRASS FORAGE Cutting#: 1
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.2
Dry Matter 87.8

PROTEINS

	% SP	% CP	% DM
Crude Protein			10.1
Adjusted Protein			10.1
Soluble Protein		24.0	2.4
Ammonia (CPE)	35.3	8.5	0.85
ADF Protein (ADICP)		14.3	1.44
NDF Protein (NDICP)		48.2	4.84
NDR Protein (NDRCP)			
Rumen Degr. Protein		62.0	6.2
Amino Acid Protein, Total			

FIBER

	% NDF	% DM
ADF	57.3	37.4
aNDF		65.3
aNDFom		63.4
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	7.07	4.62
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 (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		35.2	7.3
Water Soluble CHO (WSC-Sugar)			9.9
Starch	10.8		2.2
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.53
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM)	6.35
Calcium (%DM)	0.39
Phosphorus (%DM)	0.25
Magnesium (%DM)	0.18
Potassium (%DM)	2.08
Sulfur (%DM)	
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
NIR Statistical Confidence

ENERGY & INDEX CALCULATIONS

Equine TDN (%DM)	46.2
Equine DE (Mcal/lb)	0.92
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.61
Net Energy Gain (Mcal/lb)	0.35
ME (Mcal/lb)	1
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	5.4
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	85
Relative Forage Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	20.6
Non Structural Carbohydrates, ESC (%DM)	9.5
Non Structural Carbohydrates, WSC (%DM)	12.1
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.



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