



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DISCOVERY**
Desc: **GUERNSEY - MIDDLE**
Submitter: **DILLABOUGH, STEVE**
Account: **DISCOVERY HOLDINGS**

Copies to:

Lab ID: **29045 020**
Sampled: **08/23/2020**
Arrived: **08/24/2020**
Completed: **08/26/2020**
Reported: **08/26/2020**

GUERNSEY - MIDDLE

SAMPLE INFORMATION

Lab ID: 29045 020 Version: 3.0
Crop Year: Series:
Feed Type: LEGUME FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.8
Dry Matter 87.2

PROTEINS

	% SP	% CP	% DM
Crude Protein			16.0
Adjusted Protein			
Soluble Protein		41.0	6.6
Ammonia (CPE)	10.2	4.2	0.67
ADF Protein (ADICP)		10.5	1.68
NDF Protein (NDICP)		20.6	3.30
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.5	11.3
Amino Acid Protein, Total			

FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			71.0	40.9
aNDF		57.0		57.6
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			13.8	7.92
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	45.1	25.7	44.5	25.6
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	56.5	32.2	55.8	32.1
NDF Digestibility (240 hr)	58.8	33.5	58.2	33.5
uNDF (12 hr)				
uNDF (30 hr)	54.9	31.3	55.5	31.9
uNDF (120 hr)	43.5	24.8	44.2	25.4
uNDF (240 hr)	41.3	23.5	41.8	24.1

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		18.8	3.3
Water Soluble CHO (WSC-Sugar)			5.8
Starch			
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.18
Fatty Acids, Total			0.91
C16:0			0.27
C18:0			0.04
C18:1			0.04
C18:2			0.19
C18:3			0.13
Unsaturated Fatty Acids (RUFAL)			0.36
Fatty Acids (%Fat)			41.7

MINERALS

Ash (%DM)	10.00
Calcium (%DM)	1.15
Phosphorus (%DM)	0.23
Magnesium (%DM)	0.28
Potassium (%DM)	3.02
Sulfur (%DM)	0.25
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)

Soil Contamination Probability Probable low to none

Nitrate Probability Probable low nitrate level

NIR Statistical Confidence Excellent prediction potential

ENERGY & INDEX CALCULATIONS

TDN (%DM)	52.1
Net Energy Lactation (Mcal/lb)	0.52
Net Energy Maintenance (Mcal/lb)	0.47
Net Energy Gain (Mcal/lb)	0.22
ME (Mcal/lb)	0.85
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.44
NDF Dig. Rate (Kd, %HR, uNDF)	4.0
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	92
Relative Forage Quality (RFQ)	90
Milk per Ton (lbs/ton)	2031
Dig. Organic Matter Index (lbs/ton)	1023
Non Fiber Carbohydrates (%DM)	17.50
Non Structural Carbohydrates (%DM)	3.3
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.



Cumberland Valley Analytical Services, Inc.



4999 Zane A. Miller Drive, Waynesboro, PA 17268
www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB