



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD
Desc: 202S321 2ND CUT ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 29175 030
Sampled: 09/11/2020
Arrived: 09/15/2020
Completed: 09/16/2020
Reported: 09/16/2020

202S321 2ND CUT ALFALFA

SAMPLE INFORMATION

Lab ID: 29175 030 Version: 1.0
Crop Year: 2020 Series:
Feed Type: LEGUME FORAGE Cutting#: 2
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 11.8
Dry Matter 88.2

PROTEINS

	% SP	% CP	% DM
Crude Protein			21.9
Adjusted Protein			
Soluble Protein		41.8	9.2
Ammonia (CPE)	15.0	6.3	1.37
ADF Protein (ADICP)		6.7	1.46
NDF Protein (NDICP)		11.5	2.52
NDR Protein (NDRCP)			
Rumen Degr. Protein		70.9	15.5
Amino Acid Protein, Total			

FIBER

	%NDFom	NDFom %DM	% NDF	% DM
ADF			83.4	35.6
aNDF		41.9		42.7
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			17.8	7.59
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	45.2	18.9	44.4	19.0
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	48.0	20.1	47.0	20.1
NDF Digestibility (240 hr)	49.9	20.9	49.1	21.0
uNDF (12 hr)				
uNDF (30 hr)	54.8	23.0	55.6	23.8
uNDF (120 hr)	52.0	21.8	53.0	22.6
uNDF (240 hr)	50.1	21.0	50.9	21.8

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		22.1	5.6
Water Soluble CHO (WSC-Sugar)			6.4
Starch		3.8	1.0
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			1.87
Fatty Acids, Total			1.22
C16:0			0.36
C18:0			0.06
C18:1			0.03
C18:2			0.21
C18:3			0.38
Unsaturated Fatty Acids (RUFAL)			0.62
Fatty Acids (%Fat)			65.2

MINERALS

Ash (%DM)	10.6
Calcium (%DM)	1.40
Phosphorus (%DM)	0.30
Magnesium (%DM)	0.36
Potassium (%DM)	2.87
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)

Soil Contamination Probability Probable low to none

Nitrate Probability Probable high nitrate level

NIR Statistical Confidence Excellent prediction potential

ENERGY & INDEX CALCULATIONS

TDN (%DM)	56.5
Net Energy Lactation (Mcal/lb)	0.57
Net Energy Maintenance (Mcal/lb)	0.55
Net Energy Gain (Mcal/lb)	0.29
ME (Mcal/lb)	0.94
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.53
NDF Dig. Rate (Kd, %HR, uNDF)	5.3
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	133
Relative Forage Quality (RFQ)	138
Milk per Ton (lbs/ton)	2575
Dig. Organic Matter Index (lbs/ton)	1171
Non Fiber Carbohydrates (%DM)	25.4
Non Structural Carbohydrates (%DM)	6.6
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