



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD.
Desc: 221321 1ST CUT ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 32496 339
Sampled: 08/01/2022
Arrived: 08/05/2022
Completed: 08/08/2022
Reported: 08/08/2022

221321 1ST CUT ALFALFA

SAMPLE INFORMATION

Lab ID:	32496 339	Version:	1.0
Crop Year:	2022	Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	1
Package:	BASIC NIR		

NIR ANALYSIS RESULTS

Moisture	13.3
Dry Matter	86.7

PROTEINS

	% SP	% CP	% DM
Crude Protein			20.4
Adjusted Protein			20.4
Soluble Protein		53.7	10.9
Ammonia (CPE)	11.3	6.0	1.23
ADF Protein (ADICP)		6.5	1.33
NDF Protein (NDICP)		7.2	1.47
NDR Protein (NDRCP)			
Rumen Degr. Protein		76.8	15.7
Amino Acid Protein, Total			

FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			82.9	32.3
aNDF		37.7		39.0
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			16.6	6.48
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	46.9	17.7	45.5	17.7
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	49.3	18.6	47.9	18.7
NDF Digestibility (240 hr)	52.4	19.8	51.0	19.9
uNDF (12 hr)				
uNDF (30 hr)	53.1	20.0	54.5	21.2
uNDF (120 hr)	50.7	19.1	52.1	20.3
uNDF (240 hr)	47.6	17.9	49.0	19.1

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		27.9	8.2
Water Soluble CHO (WSC-Sugar)			8.5
Starch		5.3	1.6
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			2.25
Fatty Acids, Total			1.45
C16:0			0.33
C18:0			0.05
C18:1			0.02
C18:2			0.27
C18:3			0.47
Unsaturated Fatty Acids (RUFAL)			0.76
Fatty Acids (%Fat)			64.4

MINERALS

Ash (%DM)	10.5
Calcium (%DM)	1.31
Phosphorus (%DM)	0.31
Magnesium (%DM)	0.27
Potassium (%DM)	3.14
Sulfur (%DM)	0.24
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)	59.5
Net Energy Lactation (Mcal/lb)	0.61
Net Energy Maintenance (Mcal/lb)	0.61
Net Energy Gain (Mcal/lb)	0.34
ME (Mcal/lb)	1
AA Protein as % of Total Protein	
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.34
NDF Dig. Rate (Kd, %HR, uNDF)	5.2
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	152
Relative Forage Quality (RFQ)	152
Milk per Ton (lbs/ton)	2776
Dig. Organic Matter Index (lbs/ton)	1204
Non Fiber Carbohydrates (%DM)	29.3
Non Structural Carbohydrates, ESC (%DM)	9.8
Non Structural Carbohydrates, WSC (%DM)	10.1
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.



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