



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: ~~XXXXXXXXXX~~
 Desc: **ALFALFA HAYLAGE**
 Submitter: ~~XXXXXXXXXX~~
 Account: ~~XXXXXXXXXX~~

Copies to: ~~XXXXXXXXXX~~

Lab ID: ~~XXXXXXXXXX~~
 Sampled: **05/26/2022**
 Arrived: **05/31/2022**
 Completed: **05/31/2022**
 Reported: **05/31/2022**

ALFALFA HAYLAGE

SAMPLE INFORMATION

Lab ID: 32161 149 Version: 1.0
 Crop Year: 2022 Series:
 Feed Type: LEGUME FORAGE Cutting#: 1
 Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 74.3
 Dry Matter 25.7

PROTEINS % SP % CP % DM

Crude Protein 23.6
 Adjusted Protein 23.6
 Soluble Protein 58.9 13.9
 Ammonia (CPE) 12.8 7.5 1.78
 ADF Protein (ADICP) 7.2 1.71
 NDF Protein (NDICP) 13.0 3.07
 NDR Protein (NDRCP) 79.5 18.8
 Rumen Degr. Protein 63.0 14.88
 Amino Acid Protein, Total

FIBER %NDFom NDFom %DM % NDF % DM

ADF 82.1 30.6
 aNDF 36.4 37.3
 NDR (NDF w/o sulfite)
 Crude Fiber
 Lignin 16.9 6.32
 NDF Digestibility (12 hr) 45.4 16.5 44.4 16.9
 NDF Digestibility (24 hr)
 NDF Digestibility (30 hr) 51.0 18.6 50.2 18.7
 NDF Digestibility (72 hr)
 NDF Digestibility (120 hr) 53.7 19.6 52.8 19.7
 NDF Digestibility (240 hr) 55.9 20.4 55.1 20.5
 uNDF (12 hr) 54.6 19.9
 uNDF (30 hr) 49.0 17.9 49.8 18.6
 uNDF (120 hr) 46.3 16.9 47.2 17.6
 uNDF (240 hr) 44.1 16.1 44.9 16.8

CARBOHYDRATES % Starch % NFC % DM

Silage Acids 27.1 7.9
 Ethanol Soluble CHO (ESC-Sugar) 9.6 2.8
 Water Soluble CHO (WSC-Sugar) 3.9
 Starch 4.5 1.3
 Soluble Starch
 Soluble Fiber 57.9 16.8
 Starch Dig. (7 hr, 4 mm)
 Crude Fat 3.27
 Fatty Acids, Total 1.96
 C16:0 0.40
 C18:0 0.06
 C18:1 0.06
 C18:2 0.41
 C18:3 0.92
 Unsaturated Fatty Acids (RUFAL) 1.39
 Fatty Acids (%Fat) 59.9

MINERALS

Ash (%DM) 9.88
 Calcium (%DM) 1.75
 Phosphorus (%DM) 0.37
 Magnesium (%DM) 0.36
 Potassium (%DM) 2.57
 Sulfur (%DM) 0.30
 Sodium (%DM)
 Chloride (%DM)
 Iron (PPM)
 Manganese (PPM)
 Zinc (PPM)
 Copper (PPM)
 Molybdenum (PPM)

QUALITATIVE

pH 4.89
 Total VFA (%DM) 7.86
 Lactic Acid (%DM) 6.18
 Lactic as % of Total VFA 79
 Acetic Acid (%DM) 1.68
 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) 62.3
 Net Energy Lactation (Mcal/lb) 0.64
 Net Energy Maintenance (Mcal/lb) 0.66
 Net Energy Gain (Mcal/lb) 0.39
 ME (Mcal/lb) 1.05
 AA Protein as % of Total Protein 63.0
 NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) 5.47
 NDF Dig. Rate (Kd, %HR, uNDF) 5.6
 Starch Dig. Rate (Kd, %HR, Mertens)
 Relative Feed Value (RFV) 162
 Relative Forage Quality (RFQ) 179
 Milk per Ton (lbs/ton) 3153
 Dig. Organic Matter Index (lbs/ton) 371
 Non Fiber Carbohydrates (%DM) 29.0
 Non Structural Carbohydrates, ESC (%DM) 4.1
 Non Structural Carbohydrates, WSC (%DM) 5.2
 DCAD (meq/100gdm)
 Summative Index % (Mass Balance) 101.1

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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