



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD.
Desc: 221S322 1ST CUT ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 32496 344
Sampled: 08/01/2022
Arrived: 08/05/2022
Completed: 08/08/2022
Reported: 08/08/2022

221S322 1ST CUT ALFALFA

SAMPLE INFORMATION

Lab ID: 32496 344 Version: 1.0
Crop Year: 2022 Series:
Feed Type: LEGUME FORAGE Cutting#: 1
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 11.7
Dry Matter 88.3

PROTEINS

| | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein | | | 15.7 |
| Adjusted Protein | | | 15.7 |
| Soluble Protein | | 45.6 | 7.1 |
| Ammonia (CPE) | 12.5 | 5.7 | 0.89 |
| ADF Protein (ADICP) | | 10.8 | 1.69 |
| NDF Protein (NDICP) | | 12.9 | 2.02 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 72.8 | 11.4 |
| Amino Acid Protein, Total | | | |

FIBER

| | % NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|---------|-----------|-------|------|
| ADF | | | 81.2 | 42.0 |
| aNDF | | 50.9 | | 51.7 |
| NDR (NDF w/o sulfite) | | | | |
| Crude Fiber | | | | |
| Lignin | | | 18.6 | 9.61 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 31.5 | 16.0 | 31.4 | 16.2 |
| NDF Digestibility (72 hr) | | | | |
| NDF Digestibility (120 hr) | 37.8 | 19.2 | 37.8 | 19.5 |
| NDF Digestibility (240 hr) | 40.1 | 20.4 | 40.1 | 20.7 |
| uNDF (12 hr) | | | | |
| uNDF (30 hr) | 68.5 | 34.9 | 68.6 | 35.4 |
| uNDF (120 hr) | 62.2 | 31.7 | 62.2 | 32.2 |
| uNDF (240 hr) | 59.9 | 30.5 | 59.9 | 31.0 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (ESC-Sugar) | | 26.3 | 6.7 |
| Water Soluble CHO (WSC-Sugar) | | | 9.4 |
| Starch | | | |
| Soluble Starch | | | |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Crude Fat | | | 1.75 |
| Fatty Acids, Total | | | 1.03 |
| C16:0 | | | 0.26 |
| C18:0 | | | 0.05 |
| C18:1 | | | 0.03 |
| C18:2 | | | 0.20 |
| C18:3 | | | 0.18 |
| Unsaturated Fatty Acids (RUFAL) | | | 0.41 |
| Fatty Acids (%Fat) | | | 58.9 |

MINERALS

| | |
|------------------|------|
| Ash (%DM) | 7.51 |
| Calcium (%DM) | 1.26 |
| Phosphorus (%DM) | 0.21 |
| Magnesium (%DM) | 0.26 |
| Potassium (%DM) | 1.81 |
| Sulfur (%DM) | 0.19 |
| 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 Good prediction potential

ENERGY & INDEX CALCULATIONS

| | |
|--|------|
| TDN (%DM) | 53.4 |
| Net Energy Lactation (Mcal/lb) | 0.54 |
| Net Energy Maintenance (Mcal/lb) | 0.49 |
| Net Energy Gain (Mcal/lb) | 0.24 |
| ME (Mcal/lb) | 0.87 |
| AA Protein as % of Total Protein | |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 2.68 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 3.8 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 101 |
| Relative Forage Quality (RFQ) | 78 |
| Milk per Ton (lbs/ton) | 2117 |
| Dig. Organic Matter Index (lbs/ton) | 1018 |
| Non Fiber Carbohydrates (%DM) | 25.4 |
| Non Structural Carbohydrates, ESC (%DM) | |
| Non Structural Carbohydrates, WSC (%DM) | |
| 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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