



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD
Desc: 201K132 1ST ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 29136 048
Sampled: 09/03/2020
Arrived: 09/08/2020
Completed: 09/09/2020
Reported: 09/09/2020

201K132 1ST ALFALFA

SAMPLE INFORMATION

Lab ID: 29136 048 Version: 1.0
Crop Year: 2020 Series:
Feed Type: LEGUME FORAGE Cutting#: 1
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 9.7
Dry Matter 90.3

PROTEINS

| | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein | | | 15.2 |
| Adjusted Protein | | | |
| Soluble Protein | | 38.2 | 5.8 |
| Ammonia (CPE) | 22.1 | 8.4 | 1.28 |
| ADF Protein (ADICP) | | 9.7 | 1.47 |
| NDF Protein (NDICP) | | 15.6 | 2.36 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 69.1 | 10.5 |
| Amino Acid Protein, Total | | | |

FIBER

| | %NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|--------|-----------|-------|------|
| ADF | | | 79.1 | 34.8 |
| aNDF | | 43.6 | | 44.0 |
| NDR (NDF w/o sulfite) | | | | |
| Crude Fiber | | | | |
| Lignin | | | 18.7 | 8.20 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 35.4 | 15.4 | 35.0 | 15.4 |
| NDF Digestibility (72 hr) | | | | |
| NDF Digestibility (120 hr) | 41.8 | 18.2 | 41.3 | 18.2 |
| NDF Digestibility (240 hr) | 43.9 | 19.1 | 43.4 | 19.1 |
| uNDF (12 hr) | | | | |
| uNDF (30 hr) | 64.7 | 28.2 | 65.1 | 28.6 |
| uNDF (120 hr) | 58.2 | 25.4 | 58.7 | 25.8 |
| uNDF (240 hr) | 56.2 | 24.5 | 56.6 | 24.9 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (ESC-Sugar) | | 23.6 | 8.0 |
| Water Soluble CHO (WSC-Sugar) | | | 9.5 |
| Starch | | 5.8 | 2.0 |
| Soluble Starch | | | |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Crude Fat | | | 2.18 |
| Fatty Acids, Total | | | 1.27 |
| C16:0 | | | 0.29 |
| C18:0 | | | 0.06 |
| C18:1 | | | 0.03 |
| C18:2 | | | 0.25 |
| C18:3 | | | 0.37 |
| Unsaturated Fatty Acids (RUFAL) | | | 0.65 |
| Fatty Acids (%Fat) | | | 58.3 |

MINERALS

| | |
|------------------|------|
| Ash (%DM) | 7.19 |
| Calcium (%DM) | 1.54 |
| Phosphorus (%DM) | 0.14 |
| Magnesium (%DM) | 0.32 |
| Potassium (%DM) | 1.59 |
| Sulfur (%DM) | 0.17 |
| 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) | 58.9 |
| Net Energy Lactation (Mcal/lb) | 0.60 |
| Net Energy Maintenance (Mcal/lb) | 0.60 |
| Net Energy Gain (Mcal/lb) | 0.34 |
| ME (Mcal/lb) | 0.99 |
| AA Protein as % of Total Protein | |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 3.17 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 4.0 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 131 |
| Relative Forage Quality (RFQ) | 114 |
| Milk per Ton (lbs/ton) | 2666 |
| Dig. Organic Matter Index (lbs/ton) | 1167 |
| Non Fiber Carbohydrates (%DM) | 33.90 |
| Non Structural Carbohydrates (%DM) | 10.0 |
| 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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