



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD
Desc: 203S311 3RD CUT ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 29351 048
Sampled: 10/03/2020
Arrived: 10/13/2020
Completed: 10/14/2020
Reported: 10/14/2020

203S311 3RD CUT ALFALFA

SAMPLE INFORMATION

Lab ID: 29351 048 Version: 1.0
Crop Year: 2020 Series:
Feed Type: LEGUME FORAGE Cutting#: 3
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 11.7
Dry Matter 88.3

PROTEINS

| | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein | | | 20.1 |
| Adjusted Protein | | | |
| Soluble Protein | | 40.4 | 8.1 |
| Ammonia (CPE) | 5.2 | 2.1 | 0.42 |
| ADF Protein (ADICP) | | 5.9 | 1.18 |
| NDF Protein (NDICP) | | 8.6 | 1.72 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 70.2 | 14.1 |
| Amino Acid Protein, Total | | | |

FIBER

| | %NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|--------|-----------|-------|------|
| ADF | | | 80.0 | 27.3 |
| aNDF | | 33.9 | | 34.2 |
| NDR (NDF w/o sulfite) | | | | |
| Crude Fiber | | | | |
| Lignin | | | 16.7 | 5.71 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 46.1 | 15.6 | 45.4 | 15.5 |
| NDF Digestibility (72 hr) | | | | |
| NDF Digestibility (120 hr) | 49.3 | 16.7 | 48.7 | 16.6 |
| NDF Digestibility (240 hr) | 52.3 | 17.7 | 51.7 | 17.7 |
| uNDF (12 hr) | | | | |
| uNDF (30 hr) | 53.9 | 18.3 | 54.6 | 18.6 |
| uNDF (120 hr) | 50.7 | 17.2 | 51.3 | 17.5 |
| uNDF (240 hr) | 47.7 | 16.2 | 48.3 | 16.5 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (ESC-Sugar) | | 30.6 | 10.6 |
| Water Soluble CHO (WSC-Sugar) | | | 11.8 |
| Starch | | 5.3 | 1.8 |
| Soluble Starch | | | |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Crude Fat | | | 2.87 |
| Fatty Acids, Total | | | 1.60 |
| C16:0 | | | 0.39 |
| C18:0 | | | 0.06 |
| C18:1 | | | 0.04 |
| C18:2 | | | 0.28 |
| C18:3 | | | 0.51 |
| Unsaturated Fatty Acids (RUFAL) | | | 0.83 |
| Fatty Acids (%Fat) | | | 55.8 |

MINERALS

| | |
|------------------|------|
| Ash (%DM) | 10.0 |
| Calcium (%DM) | 1.53 |
| Phosphorus (%DM) | 0.24 |
| Magnesium (%DM) | 0.31 |
| Potassium (%DM) | 2.85 |
| Sulfur (%DM) | 0.29 |
| 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) | 63.6 |
| Net Energy Lactation (Mcal/lb) | 0.65 |
| Net Energy Maintenance (Mcal/lb) | 0.68 |
| Net Energy Gain (Mcal/lb) | 0.41 |
| ME (Mcal/lb) | 1.08 |
| AA Protein as % of Total Protein | |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 4.35 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 5.1 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 184 |
| Relative Forage Quality (RFQ) | 189 |
| Milk per Ton (lbs/ton) | 3116 |
| Dig. Organic Matter Index (lbs/ton) | 1267 |
| Non Fiber Carbohydrates (%DM) | 34.6 |
| Non Structural Carbohydrates (%DM) | 12.4 |
| 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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