



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: HUBKA FARMS LTD
Desc: 181M21 ALFALFA
Submitter: HUBKA, CALE
Account: HUBKA FARMS LTD

Copies to: WHITTLE, CHRIS

Lab ID: 24782 058
Sampled: 08/21/2018
Arrived: 08/27/2018
Completed: 08/28/2018
Reported: 08/28/2018

181M21 ALFALFA

SAMPLE INFORMATION

Lab ID: 24782 058 Version: 1.0
Crop Year: 2018 Series:
Feed Type: LEGUME FORAGE Cutting#: 1
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 12.1
Dry Matter 87.9

PROTEINS

| | % SP | % CP | % DM |
|-------------------------|------|------|------|
| Crude Protein | | | 18.2 |
| Adjusted Protein | | | |
| Soluble Protein | | 41.4 | 7.6 |
| Ammonia (CPE) | 6.0 | 2.5 | 0.45 |
| ADF Protein (ADICP) | | 6.9 | 1.26 |
| NDF Protein (NDICP) | | 7.7 | 1.41 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 70.7 | 12.9 |
| Rumen Deg. CP (Strep.G) | | | |

FIBER

| | % NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|---------|-----------|-------|------|
| ADF | | | 77.4 | 21.3 |
| aNDF | | 27.2 | | 27.5 |
| NDR (NDF w/o sulfite) | | | | |
| peNDF | | | | |
| Crude Fiber | | | | |
| Lignin | | | 19.6 | 5.38 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 46.3 | 12.6 | 45.7 | 12.6 |
| NDF Digestibility (48 hr) | | | | |
| NDF Digestibility (120 hr) | 48.5 | 13.2 | 48.1 | 13.2 |
| NDF Digestibility (240 hr) | 52.6 | 14.3 | 51.9 | 14.3 |
| uNDF (30 hr) | 53.7 | 14.6 | 54.3 | 14.9 |
| uNDF (120 hr) | 51.5 | 14.0 | 51.9 | 14.3 |
| uNDF (240 hr) | 47.5 | 12.9 | 48.1 | 13.2 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|-----------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (Sugar) | | 25.1 | 10.7 |
| Water Soluble CHO (Sugar) | | | 11.3 |
| Starch | | 7.7 | 3.3 |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Fatty Acids, Total | | | 1.80 |
| Fatty Acids (%Fat) | | | 67.2 |
| Crude Fat | | | 2.68 |

MINERALS

| | |
|-------------------|------|
| Ash (%DM) | 10.4 |
| Calcium (%DM) | 1.91 |
| Phosphorus (%DM) | 0.20 |
| Magnesium (%DM) | 0.45 |
| Potassium (%DM) | 2.91 |
| Sulfur (%DM) | 0.35 |
| Sodium (%DM) | |
| Chloride (%DM) | |
| Iron (PPM) | |
| Manganese (PPM) | |
| Zinc (PPM) | |
| Copper (PPM) | |
| Nitrate Ion (%DM) | |
| Selenium (PPM) | |
| Molybdenum (PPM) | |

QUALITATIVE

| | |
|--------------------------------|---------------------------|
| Total VFA (%DM) | |
| Lactic Acid (%DM) | |
| Lactic as % of Total VFA | |
| Acetic Acid (%DM) | |
| Butyric Acid (%DM) | |
| 1, 2 Propanediol (%DM) | |
| Soil Contamination Probability | Probable low to none |
| Nitrate Probability | |
| NIR Statistical Confidence | Good prediction potential |

ENERGY & INDEX CALCULATIONS

| | |
|--|------|
| pH | |
| TDN (%DM) | 67.0 |
| Net Energy Lactation (Mcal/lb) | 0.68 |
| Net Energy Maintenance (Mcal/lb) | 0.68 |
| Net Energy Gain (Mcal/lb) | 0.41 |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 5.72 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 5.1 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 245 |
| Relative Forage Quality (RFQ) | 255 |
| Milk per Ton (lbs/ton) | 3371 |
| Dig. Organic Matter Index (lbs/ton) | 1313 |
| Non Fiber Carbohydrates (%DM) | 42.6 |
| Non Structural Carbohydrates (%DM) | 14.0 |
| DCAD (meq/100gdm) | |
| CNCPS / CPM Lignin Factor | 5.5 |
| Summative Index % (Mass Balance) | |
| Additional sample information, source and lab pictures | |



Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms



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