



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DEVRY FORAGES**
Desc: **608 2ND**
Submitter: **CVAS, ANALYSIS**
Account: **CVAS ANALYSIS**

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DE KOK, MAKAYLA

Lab ID: **34090 133**
Sampled: **08/02/2023**
Arrived: **08/03/2023**
Completed: **08/03/2023**
Reported: **08/03/2023**

608 2ND

SAMPLE INFORMATION

Lab ID: 34090 133 Version: 1.0
Crop Year: Series:
Feed Type: LEGUME FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 11.6
Dry Matter 88.4

PROTEINS

| | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein | | | 23.0 |
| Adjusted Protein | | | 23.0 |
| Soluble Protein | | 40.7 | 9.4 |
| Ammonia (CPE) | 14.9 | 6.0 | 1.39 |
| ADF Protein (ADICP) | | 5.4 | 1.23 |
| NDF Protein (NDICP) | | 11.0 | 2.52 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 70.4 | 16.2 |
| Amino Acid Protein, Total | | | |

FIBER

| | %NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|--------|-----------|-------|------|
| ADF | | | 85.2 | 29.1 |
| aNDF | | 33.1 | | 34.2 |
| NDR (NDF w/o sulfite) | | | | |
| Crude Fiber | | | | |
| Lignin | | | 17.5 | 6.00 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 47.8 | 15.8 | 46.4 | 15.9 |
| NDF Digestibility (72 hr) | | | | |
| NDF Digestibility (120 hr) | 50.2 | 16.6 | 49.0 | 16.8 |
| NDF Digestibility (240 hr) | 52.7 | 17.4 | 51.1 | 17.5 |
| uNDF (12 hr) | | | | |
| uNDF (30 hr) | 52.2 | 17.3 | 53.6 | 18.3 |
| uNDF (120 hr) | 49.8 | 16.5 | 51.0 | 17.5 |
| uNDF (240 hr) | 47.3 | 15.7 | 48.9 | 16.7 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (ESC-Sugar) | | 18.4 | 5.9 |
| Water Soluble CHO (WSC-Sugar) | | | 8.4 |
| Starch | | 4.4 | 1.4 |
| Soluble Starch | | | |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Crude Fat | | | 2.72 |
| Fatty Acids, Total | | | 1.59 |
| C16:0 | | | 0.43 |
| C18:0 | | | 0.06 |
| C18:1 | | | 0.04 |
| C18:2 | | | 0.28 |
| C18:3 | | | 0.55 |
| Unsaturated Fatty Acids (RUFAL) | | | 0.87 |
| Fatty Acids (%Fat) | | | 58.5 |

Values in bold were analyzed by wet chemistry methods.

MINERALS

| | |
|------------------|------|
| Ash (%DM) | 10.5 |
| Calcium (%DM) | 1.74 |
| Phosphorus (%DM) | 0.32 |
| Magnesium (%DM) | 0.42 |
| Potassium (%DM) | 2.65 |
| Sulfur (%DM) | 0.37 |
| 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 Excellent prediction potential

ENERGY & INDEX CALCULATIONS

| | |
|--|-------|
| TDN (%DM) | 62.9 |
| Net Energy Lactation (Mcal/lb) | 0.64 |
| Net Energy Lactation NASEM (Mcal/lb) | 0.75 |
| Net Energy Maintenance (Mcal/lb) | 0.67 |
| Net Energy Gain (Mcal/lb) | 0.40 |
| ME (Mcal/lb) | 1.07 |
| AA Protein as % of Total Protein | |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 4.86 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 5.5 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 180 |
| Relative Forage Quality (RFQ) | 186 |
| Milk per Ton (lbs/ton) | 3105 |
| Dig. Organic Matter Index (lbs/ton) | 1278 |
| ROM (Residual Organic Matter) | 30.21 |
| NFC (Non-Fiber Carbohydrates)(%DM) | 32.1 |
| NSC (Non-Structural Carbohydrates) ESC (%DM) | 7.3 |
| NSC (Non-Structural Carbohydrates) WSC (%DM) | 9.8 |
| DCAD (meq/100gdm) | |
| Summative Index % (Mass Balance) | |

Additional sample information, submitted documents and lab pictures linked to QR code

