



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DEVRY FORAGES**
Desc: **#587**
Submitter: **CVAS, ANALYSIS**
Account: **CVAS ANALYSIS**

Copies to: **NEELS, PETE**
DE KOK, MAKAYLA

Lab ID: **33875 112**
Sampled: **06/27/2023**
Arrived: **06/28/2023**
Completed: **06/29/2023**
Reported: **06/29/2023**

#587

SAMPLE INFORMATION

Lab ID: 33875 112 Version: 1.0
Crop Year: Series:
Feed Type: LEGUME FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 10.4
Dry Matter 89.6

PROTEINS

| | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein | | | 18.0 |
| Adjusted Protein | | | 18.0 |
| Soluble Protein | | 46.6 | 8.4 |
| Ammonia (CPE) | 11.1 | 5.2 | 0.93 |
| ADF Protein (ADICP) | | 6.9 | 1.25 |
| NDF Protein (NDICP) | | 7.3 | 1.31 |
| NDR Protein (NDRCP) | | | |
| Rumen Degr. Protein | | 73.3 | 13.2 |
| Amino Acid Protein, Total | | | |

FIBER

| | %NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|--------|-----------|-------|------|
| ADF | | | 87.0 | 32.8 |
| aNDF | | 37.2 | | 37.7 |
| NDR (NDF w/o sulfite) | | | | |
| Crude Fiber | | | | |
| Lignin | | | 18.3 | 6.91 |
| NDF Digestibility (12 hr) | | | | |
| NDF Digestibility (24 hr) | | | | |
| NDF Digestibility (30 hr) | 39.7 | 14.8 | 39.5 | 14.9 |
| NDF Digestibility (72 hr) | | | | |
| NDF Digestibility (120 hr) | 41.9 | 15.6 | 41.6 | 15.7 |
| NDF Digestibility (240 hr) | 43.5 | 16.2 | 43.4 | 16.4 |
| uNDF (12 hr) | | | | |
| uNDF (30 hr) | 60.3 | 22.4 | 60.5 | 22.8 |
| uNDF (120 hr) | 58.1 | 21.6 | 58.4 | 22.0 |
| uNDF (240 hr) | 56.5 | 21.0 | 56.6 | 21.4 |

CARBOHYDRATES

| | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids | | | |
| Ethanol Soluble CHO (ESC-Sugar) | | 22.2 | 7.7 |
| Water Soluble CHO (WSC-Sugar) | | | 10.0 |
| Starch | | 2.8 | 1.0 |
| Soluble Starch | | | |
| Soluble Fiber | | | |
| Starch Dig. (7 hr, 4 mm) | | | |
| Crude Fat | | | 2.24 |
| Fatty Acids, Total | | | 1.35 |
| C16:0 | | | 0.34 |
| C18:0 | | | 0.06 |
| C18:1 | | | 0.03 |
| C18:2 | | | 0.23 |
| C18:3 | | | 0.44 |
| Unsaturated Fatty Acids (RUFAL) | | | 0.70 |
| Fatty Acids (%Fat) | | | 60.3 |

Values in bold were analyzed by wet chemistry methods.

MINERALS

| | |
|------------------|------|
| Ash (%DM) | 8.71 |
| Calcium (%DM) | 1.64 |
| Phosphorus (%DM) | 0.21 |
| Magnesium (%DM) | 0.37 |
| Potassium (%DM) | 2.21 |
| 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)

Nitrate-Nitrogen, ppm

Soil Contamination Probability Probable low to none

NIR Statistical Confidence Excellent prediction potential

ENERGY & INDEX CALCULATIONS

| | |
|--|-------|
| TDN (%DM) | 61.1 |
| Net Energy Lactation (Mcal/lb) | 0.62 |
| Net Energy Lactation NASEM (Mcal/lb) | 0.69 |
| Net Energy Maintenance (Mcal/lb) | 0.64 |
| Net Energy Gain (Mcal/lb) | 0.37 |
| ME (Mcal/lb) | 1.03 |
| AA Protein as % of Total Protein | |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 3.80 |
| NDF Dig. Rate (Kd, %HR, uNDF) | 5.2 |
| Starch Dig. Rate (Kd, %HR, Mertens) | |
| Relative Feed Value (RFV) | 156 |
| Relative Forage Quality (RFQ) | 150 |
| Milk per Ton (lbs/ton) | 2877 |
| Dig. Organic Matter Index (lbs/ton) | 1234 |
| ROM (Residual Organic Matter) | 33.45 |
| NFC (Non-Fiber Carbohydrates)(%DM) | 34.6 |
| NSC (Non-Structural Carbohydrates) ESC (%DM) | 8.7 |
| NSC (Non-Structural Carbohydrates) WSC (%DM) | 11.0 |
| DCAD (meq/100gdm) | |
| Summative Index % (Mass Balance) | |

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

