



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **DEVRY FORAGES**  
Desc: **#690 1ST CUT 430 BALES**  
Submitter: **CVAS, ANALYSIS**  
Account: **CVAS ANALYSIS**

Copies to: **NEELS, PETE**  
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Lab ID: **35077 123**  
Sampled: **06/25/2024**  
Arrived: **06/26/2024**  
Completed: **06/28/2024**  
Reported: **06/28/2024**

## #690 1ST CUT 430 BALES

### SAMPLE INFORMATION

Lab ID: 35077 123      Version: 1.0  
Crop Year:                      Series:  
Feed Type: LEGUME FORAGE      Cutting#:  
Package: BASIC NIR

### NIR ANALYSIS RESULTS

Moisture 12.6  
Dry Matter 87.4

### PROTEINS

|                           | % SP | % CP | % DM |
|---------------------------|------|------|------|
| Crude Protein             |      |      | 19.3 |
| Adjusted Protein          |      |      | 19.3 |
| Soluble Protein           |      | 42.2 | 8.2  |
| Ammonia (CPE)             | 13.9 | 5.8  | 1.13 |
| ADF Protein (ADICP)       |      | 7.6  | 1.46 |
| NDF Protein (NDICP)       |      | 15.3 | 2.95 |
| NDR Protein (NDRCP)       |      |      |      |
| Rumen Degr. Protein       |      | 71.1 | 13.7 |
| Amino Acid Protein, Total |      |      |      |

### FIBER

|                            | %NDFom | NDFom %DM | % NDF | % DM |
|----------------------------|--------|-----------|-------|------|
| ADF                        |        |           | 83.1  | 35.3 |
| aNDF                       |        | 41.2      |       | 42.5 |
| NDR (NDF w/o sulfite)      |        |           |       |      |
| Crude Fiber                |        |           |       |      |
| Lignin                     |        |           | 18.3  | 7.78 |
| NDF Digestibility (12 hr)  | 25.6   | 10.6      | 25.0  | 11.0 |
| NDF Digestibility (24 hr)  |        |           |       |      |
| NDF Digestibility (30 hr)  | 42.7   | 17.6      | 41.5  | 17.6 |
| NDF Digestibility (72 hr)  |        |           |       |      |
| NDF Digestibility (120 hr) | 47.5   | 19.6      | 46.2  | 19.6 |
| NDF Digestibility (240 hr) | 49.7   | 20.5      | 48.1  | 20.4 |
| uNDF (12 hr)               | 74.4   | 30.7      |       |      |
| uNDF (30 hr)               | 57.3   | 23.6      | 58.5  | 24.9 |
| uNDF (120 hr)              | 52.5   | 21.6      | 53.8  | 22.9 |
| uNDF (240 hr)              | 50.3   | 20.7      | 51.9  | 22.0 |

### CARBOHYDRATES

|                                 | % Starch | % NFC | % DM |
|---------------------------------|----------|-------|------|
| Silage Acids                    |          |       |      |
| Ethanol Soluble CHO (ESC-Sugar) |          | 21.2  | 6.2  |
| Water Soluble CHO (WSC-Sugar)   |          |       | 8.7  |
| Starch                          |          | 0.0   | 0.0  |
| Soluble Starch                  |          |       |      |
| Soluble Fiber                   |          |       |      |
| Starch Dig. (7 hr, 4 mm)        |          |       |      |
| Crude Fat                       |          |       | 2.11 |
| Fatty Acids, Total              |          |       | 1.13 |
| C16:0                           |          |       | 0.35 |
| C18:0                           |          |       | 0.06 |
| C18:1                           |          |       | 0.03 |
| C18:2                           |          |       | 0.22 |
| C18:3                           |          |       | 0.27 |
| Unsaturated Fatty Acids (RUFAL) |          |       | 0.52 |
| Fatty Acids (%Fat)              |          |       | 53.6 |

### MINERALS

|                  |      |
|------------------|------|
| Ash (%DM)        | 9.66 |
| Calcium (%DM)    | 1.56 |
| Phosphorus (%DM) | 0.19 |
| Magnesium (%DM)  | 0.34 |
| Potassium (%DM)  | 2.25 |
| Sulfur (%DM)     | 0.26 |
| 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)  | 57.7  |
| Net Energy Lactation (Mcal/lb)                   | 0.59  |
| Net Energy Maintenance (Mcal/lb)                 | 0.57  |
| Net Energy Gain (Mcal/lb)                        | 0.32  |
| ME (Mcal/lb)                                     | 0.96  |
| AA Protein as % of Total Protein                 |       |
| NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) | 4.15  |
| NDF Dig. Rate (Kd, %HR, uNDF)                    | 4.8   |
| Starch Dig. Rate (Kd, %HR, Mertens)              |       |
| Relative Feed Value (RFV)                        | 135   |
| Relative Forage Quality (RFQ)                    | 130   |
| Milk per Ton (lbs/ton)                           | 2667  |
| Beef per Ton (lbs/ton)                           |       |
| Dig. Organic Matter Index (lbs/ton)              | 1166  |
| ROM (Residual Organic Matter)                    | 28.45 |
| NFC (Non-Fiber Carbohydrates)(%DM)               | 29.4  |
| NSC (Non-Structural Carbohydrates) ESC (%DM)     | 6.2   |
| NSC (Non-Structural Carbohydrates) WSC (%DM)     |       |
| 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.

