Soil, Plant & Pest Center
5201 Marchant Dr. | Nashville, TN 37211
615.832.5820 | SoilLab@Tennessee.edu
soillab.tennessee.edu

UT EXTENSION
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Forage Analysis Report

[redacted]

County : Rutherford
Email : [redacted]

SampleID	[redacted]	**Type**	Hay
Lab ID#	109359	**Species**	Mixed Grasses
Reported	8/9/2019	**Clover**	No

NIRS - Near-Infared Spectroscopy Analysis*

Moisture - *as received*	11	%
Dry Matter (DM) - *as received*	89	%
Ash	4.11	%
Crude Protein (CP)	7.99	%
Lysine	0.28	%
Fat	2.19	%
Relative Forage Quality (RFQ)	76	
Ensiled pH - *Wet Chemistry*		

Calculated Energy Values

Digestible Energy (DE)	1.85	MCal/kg
Total Digestible Nutrients (TDN)	54.99	%
Net Energy Maintenance (NE_m)	0.52	MCal/lb
Net Energy Gain (NE_g)	0.26	MCal/lb
Net Energy Lacatation (NE_l)	0.55	MCal/lb

Minerals - NIRS

Calcium (Ca)	%
Phosphorus (P)	%
Magnesium (Mg)	%
Potassium (K)	%

Carbohydrates

Acid Detergent Fiber (ADF)	41.64	%
Neutral Detergent Fiber (NDF)	70.12	%
Lignin	5.14	%
In-vitro True DM Digestibility 48H (IVTDMD48h)	61.76	%
Fructan	1.65	%
Starch	2.61	%
Sugar (ESC)	9.46	%
Water Soluble Carbohydrates (WSC)	10.18	%
Non-Structural Carbohydrates (NSC)	12.79	%
Non-Fiber Carbohydrates (NFC)	15.59	%

Minerals and Nitrate - Wet Chemistry

Calcium (Ca)	0.60	%
Phosphorus (P)	0.22	%
Magnesium (Mg)	0.30	%
Potassium (K)	1.67	%
Sulfur (S)	0.20	%
Copper (Cu)	3	ppm
Zinc (Zn)	15	ppm
Manganese (Mn)	82	ppm
Iron (Fe)	92	ppm
Boron (B)	5	ppm
Nitrate (NO_3)	100	ppm

*All values reported on a 100% DM Basis, unless otherwise noted.

ppm = mg/kg