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UT EXTENSION
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Forage Analysis Report

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County : Hancock
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SampleID	6/2 CTTNG	**Type**	Hay
Lab ID#	112028	**Species**	Mixed Grasses
Reported	6/16/2022	**Clover**	No

NIRS - Near-Infared Spectroscopy Analysis*

Moisture - *as received*	15	%
Dry Matter (DM) - *as received*	85	%
Ash	3.28	%
Crude Protein (CP)	16.80	%
Lysine	0.58	%
Fat	2.56	%
Relative Forage Quality (RFQ)	111	
Ensiled pH - *Wet Chemistry*		

Calculated Energy Values

Digestible Energy (DE)	2.48	MCal/kg
Total Digestible Nutrients (TDN)	66.94	%
Net Energy Maintenance (NE_m)	0.70	MCal/lb
Net Energy Gain (NE_g)	0.43	MCal/lb
Net Energy Lacatation (NE_l)	0.68	MCal/lb

Minerals - NIRS

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

Carbohydrates

Acid Detergent Fiber (ADF)	30.23	%
Neutral Detergent Fiber (NDF)	58.81	%
Lignin	3.98	%
In-vitro True DM Digestibility 48H (IVTDMD48h)	76.70	%
Fructan	2.30	%
Starch	1.67	%
Sugar (ESC)	7.66	%
Water Soluble Carbohydrates (WSC)	8.84	%
Non-Structural Carbohydrates (NSC)	10.51	%
Non-Fiber Carbohydrates (NFC)	18.55	%

Minerals and Nitrate - Wet Chemistry

Calcium (Ca)	0.66	%
Phosphorus (P)	0.34	%
Magnesium (Mg)	0.43	%
Potassium (K)	1.51	%
Sulfur (S)	0.27	%
Copper (Cu)	6	ppm
Zinc (Zn)	21	ppm
Manganese (Mn)	102	ppm
Iron (Fe)	152	ppm
Boron (B)	3	ppm
Nitrate (NO_3)	0	ppm

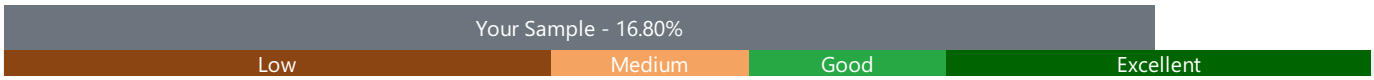
*All values reported on a 100% DM Basis, unless otherwise noted.

ppm = mg/kg

Forage Analysis Report

Understanding your hay quality - The graphs below are presented to provide a general guide to evaluate the Crude Protein (CP) and Total Digestible Nutrients (TDN) levels of the forage submitted for testing. If you need help understanding the results or information on developing a balanced ration for a specific animal(s), please contact your local UT Extension agent or visit the following website for definition information. http://tiny.utk.edu/FA-Definitions

Crude Protein



Low = <8% | Medium = 8% to 10.9% | Good = 11% to 13.9% | Excellent = ≥14%

TDN

Low = <50% | Medium = 50% to 55% | Good = 55.1% to 59.9% | Excellent = ≥60%