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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	MAY1STCUT	**Type**	Hay
Lab ID#	111973	**Species**	Mixed Grasses
Reported	5/26/2022	**Clover**	No

NIRS - Near-Infared Spectroscopy Analysis*

Moisture - *as received*	12	%
Dry Matter (DM) - *as received*	88	%
Ash	3.20	%
Crude Protein (CP)	12.74	%
Lysine	0.44	%
Fat	2.06	%
Relative Forage Quality (RFQ)	98	
Ensiled pH - *Wet Chemistry*		

Calculated Energy Values

Digestible Energy (DE)	2.22	MCal/kg
Total Digestible Nutrients (TDN)	63.53	%
Net Energy Maintenance (NE_m)	0.65	MCal/lb
Net Energy Gain (NE_g)	0.38	MCal/lb
Net Energy Lacatation (NE_l)	0.65	MCal/lb

Minerals - NIRS

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

Carbohydrates

Acid Detergent Fiber (ADF)	33.49	%
Neutral Detergent Fiber (NDF)	62.89	%
Lignin	4.41	%
In-vitro True DM Digestibility 48H (IVTDMD48h)	72.62	%
Fructan	2.26	%
Starch	2.78	%
Sugar (ESC)	8.31	%
Water Soluble Carbohydrates (WSC)	9.28	%
Non-Structural Carbohydrates (NSC)	12.06	%
Non-Fiber Carbohydrates (NFC)	19.11	%

Minerals and Nitrate - Wet Chemistry

Calcium (Ca)	0.49	%
Phosphorus (P)	0.33	%
Magnesium (Mg)	0.39	%
Potassium (K)	1.20	%
Sulfur (S)	0.15	%
Copper (Cu)	4	ppm
Zinc (Zn)	20	ppm
Manganese (Mn)	193	ppm
Iron (Fe)	72	ppm
Boron (B)	4	ppm
Nitrate (NO_3)	0	ppm

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

ppm = mg/kg

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.

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%