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UT EXTENSION
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Forage Analysis Report

David Jones Jones Hay Company
1056 Highway 131
Thorn Hill , TN 37881

County : Hancock
Email : davidjones1955@hotmail.com

SampleID	OCT 2 CUT	**Type**	Hay
Lab ID#	110561	**Species**	Mixed Grasses
Reported	10/27/2020	**Clover**	No

NIRS - Near-Infared Spectroscopy Analysis*

Moisture - *as received*	15	%
Dry Matter (DM) - *as received*	85	%
Ash	0.43	%
Crude Protein (CP)	13.09	%
Lysine	0.46	%
Fat	0.22	%
Relative Forage Quality (RFQ)	104	
Ensiled pH - *Wet Chemistry*		

Calculated Energy Values

Digestible Energy (DE)	2.23	MCal/kg
Total Digestible Nutrients (TDN)	63.76	%
Net Energy Maintenance (NE_m)	0.65	MCal/lb
Net Energy Gain (NE_g)	0.39	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)	33.27	%
Neutral Detergent Fiber (NDF)	59.45	%
Lignin	1.64	%
In-vitro True DM Digestibility 48H (IVTDMD48h)	2.31	%
Fructan	76.59	%
Starch	10.44	%
Sugar (ESC)	0.29	%
Water Soluble Carbohydrates (WSC)	5.28	%
Non-Structural Carbohydrates (NSC)	15.72	%
Non-Fiber Carbohydrates (NFC)	26.81	%

Minerals and Nitrate - Wet Chemistry

Calcium (Ca)	0.39	%
Phosphorus (P)	0.25	%
Magnesium (Mg)	0.31	%
Potassium (K)	1.43	%
Sulfur (S)	0.18	%
Copper (Cu)	4	ppm
Zinc (Zn)	25	ppm
Manganese (Mn)	125	ppm
Iron (Fe)	49	ppm
Boron (B)	4	ppm
Nitrate (NO_3)	101	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%