



# Forage Analysis Report

**DAVID JONES**  
**1056 HWY 131**  
**THORN HILL, TN 37881**

County: Hancock  
 Email: [DKPEARSON444@GMAIL.COM](mailto:DKPEARSON444@GMAIL.COM)

Sample ID: MAY 2ND 1ST CUT  
 Lab Number: 114307  
 Reported: 5/17/2024  
 Type: Hay  
 Species: Mixed Grasses

## Near-Infrared Spectroscopy Analysis (NIRS)<sup>1</sup>

Water Content			as received		
DM	Dry Matter	86 %			
Moisture	Moisture	14 %			
Protein			100% DM basis		
CP	Crude Protein	16.34 %			
ADICP	Acid Detergent Insoluble CP	0.89 %			
NDICP	Neutral Detergent Insoluble CP	2.94 %			
InsolCP	Insoluble Crude Protein	9.81 %			
Lysine	Lysine	0.57 %			
Fiber			100% DM basis		
ADF	Acid Detergent Fiber	28.17 %			
NDF	Neutral Detergent Fiber	58.21 %			
Lignin	Lignin	3.47 %			
Carbohydrates			100% DM basis		
ESC	Sugar	9.83 %			
Fructan	Fructan	1.94 %			
Starch	Starch	1.84 %			
WSC	Water Soluble Carbohydrates	11.21 %			
NSC	Non-Structural Carbohydrates	13.05 %			
NFC	Non-Fiber Carbohydrates	20.20 %			
Digestibility			100% DM basis		
IVTDMD48h	<i>in-vitro</i> True DM Digestibility 48h	78.40 %			
NDFD48h	Neutral Detergent Fiber Digestibility 48h	64.00 %			
Fat			100% DM basis		
Fat	Fat	2.83 %			
Minerals			100% DM basis		
Ash	Ash	2.42 %			
Ca	Calcium	%			
P	Phosphorus	%			
Mg	Magnesium	%			
K	Potassium	%			
Energy Calculations			100% DM basis		
TDN	Total Digestible Nutrients	69.10 %			
DE	Digestible Energy	1.95 Mcal/kg			
NE <sub>m</sub>	Net Energy Maintenance	0.73 Mcal/lb			
NE <sub>g</sub>	Net Energy Gain	0.46 Mcal/lb			
NE <sub>l</sub>	Net Energy Lactation	0.71 Mcal/lb			
Components			Wet Chemistry		
pH	Ensiled	pH			
NO <sub>3</sub>	Nitrates	0 ppm <sup>2</sup>			
Calculated Parameters <sup>3</sup>			Scale		
RFQ	Relative Forage Quality	116			
RFV	Relative Feed Value	0			

<sup>2</sup> ppm = mg/kg

<sup>3</sup> Relative Forage Quality (RFQ) is reported for all grass, mixed, legume hays and haylages; and, Relative Feed Value (RFV) is reported for Alfalfa only. No nutritive value scale is available for corn silage

<sup>1</sup> All nutritive analyses at 100% Dry Matter (DM) basis unless otherwise noted. Not all constituents are available for each forage type submitted to the Soil, Plant and Pest Center. Forage analysis calibrations provided by the NIRS Forage and Feed Consortium.

# Forage Analysis Report

**DAVID JONES**  
**1056 HWY 131**  
**THORN HILL, TN 37881**  
County: Hancock  
Email: DKPEARSON444@GMAIL.COM

Sample ID: MAY 2ND 1ST CUT  
Lab Number: 114307  
Reported: 5/17/2024  
Type: Hay  
Species: Mixed Grasses

## Understanding 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 [utbeef.com](http://utbeef.com).

### Crude Protein (CP)



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

### Total Digestible Nutrients (TDN)



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

## Wet Chemistry

Minerals		<i>as received</i>
Ca	Calcium	0.49 %
P	Phosphorus	0.35 %
Mg	Magnesium	0.26 %
K	Potassium	1.96 %
S	Sulfur	0.17 %
Cu	Copper	6 ppm <sup>1</sup>
Zn	Zinc	20 ppm
Mn	Manganese	129 ppm
Fe	Iron	59 ppm
B	Boron	5 ppm

<sup>1</sup> ppm = mg/kg

## Payment Details

Receipt:  
Amount: \$47.00  
Method: 2350  
Payment Date: 5/10/2024