



Forage Analysis Report

David Jones
1056 Hwy 131
Horn Hill, TN 37881

County: Hancock
Email: dkpearson444@gmail.com

Sample ID: July 2nd Cutting
Lab Number: 116524
Reported: 8/8/2025
Type: Hay

Forage Species (Identified by Client): Mixed Grasses

Near-Infrared Spectroscopy Analysis (NIRS)¹

Water Content			as received
DM	Dry Matter	90	%
Moisture	Moisture	10	%
Protein			100% DM basis
CP	Crude Protein	18.36	%
ADICP	Acid Detergent Insoluble CP	1.05	%
NDICP	Neutral Detergent Insoluble CP	3.80	%
InsolCP	Insoluble Crude Protein	11.45	%
Lysine	Lysine	0.64	%
Fiber			100% DM basis
ADF	Acid Detergent Fiber	31.82	%
NDF	Neutral Detergent Fiber	62.26	%
Lignin	Lignin	4.79	%
Carbohydrates			100% DM basis
ESC	Sugar	4.85	%
Fructan	Fructan	2.30	%
Starch	Starch	1.28	%
WSC	Water Soluble Carbohydrates	6.89	%
NSC	Non-Structural Carbohydrates	8.17	%
NFC	Non-Fiber Carbohydrates	12.43	%
Digestibility			100% DM basis
IVTDM48h	in-vitro True DM Digestibility 48h	74.66	%
NDFD48h	Neutral Detergent Fiber Digestibility 48h	51.00	%
Fat			100% DM basis
Fat	Fat	3.26	%
Minerals			100% DM basis
Ash	Ash	3.69	%
Ca	Calcium		%
P	Phosphorus		%
Mg	Magnesium		%
K	Potassium		%
Energy Calculations			100% DM basis
TDN	Total Digestible Nutrients	65.28	%
DE	Digestible Energy	1.89	MCal/kg
NE _m	Net Energy Maintenance	0.67	MCal/lb
NE _g	Net Energy Gain	0.41	MCal/lb
NE _l	Net Energy Lacatation	0.67	MCal/lb
Components			Wet Chemistry
pH	Ensiled		pH
NO ₃	Nitrates	622	ppm ²
Calculated Parameters ³			Scale
RFQ	Relative Forage Quality	102	
RFV	Relative Feed Value	0	

² ppm = mg/kg

³ 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

¹ 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
Horn Hill, TN 37881
County: Hancock
Email: dkpearson444@gmail.com

Sample ID: July 2nd Cutting
Lab Number: 116524
Reported: 8/8/2025
Type: Hay
Forage Species (Identified by Client): 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.

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			Payment Details	
Minerals		as received	Receipt: Amount: \$47.00 Method: 2570 Payment Date: 8/1/2025	
Ca	Calcium	0.78 %		
P	Phosphorus	0.36 %		
Mg	Magnesium	0.50 %		
K	Potassium	1.44 %		
S	Sulfur	0.20 %		
Cu	Copper	7 ppm ¹		
Zn	Zinc	36 ppm		
Mn	Manganese	275 ppm		
Fe	Iron	304 ppm		
B	Boron	2 ppm		

¹ ppm = mg/kg