



Forage Analysis Report

GREGORY MOCK
157 ETT BROWN ROAD
DEER LODGE, TN 37726

 County: Morgan
 Email: GDM1951@GMAIL.COM

 Sample ID: Hirs71 OG
 Lab Number: 117116
 Reported: 10/22/2025
 Type: Hay

Forage Species (Identified by Client): Orchardgrass

Near-Infrared Spectroscopy Analysis (NIRS)¹

Water Content			as received
DM	Dry Matter		90 %
Moisture	Moisture		10 %
Protein			100% DM basis
CP	Crude Protein		17.04 %
ADICP	Acid Detergent Insoluble CP		1.18 %
NDICP	Neutral Detergent Insoluble CP		3.81 %
InsolCP	Insoluble Crude Protein		11.27 %
Lysine	Lysine		0.59 %
Fiber			100% DM basis
ADF	Acid Detergent Fiber		32.04 %
NDF	Neutral Detergent Fiber		58.78 %
Lignin	Lignin		4.79 %
Carbohydrates			100% DM basis
ESC	Sugar		4.72 %
Fructan	Fructan		2.05 %
Starch	Starch		0.38 %
WSC	Water Soluble Carbohydrates		7.35 %
NSC	Non-Structural Carbohydrates		7.73 %
NFC	Non-Fiber Carbohydrates		13.59 %
Digestibility			100% DM basis
IVTDM48h	in-vitro True DM Digestibility 48h		78.06 %
NDFD48h	Neutral Detergent Fiber Digestibility 48h		60.00 %
Fat			100% DM basis
Fat	Fat		3.80 %
Minerals			100% DM basis
Ash	Ash		6.79 %
Ca	Calcium		0.52 %
P	Phosphorus		0.37 %
Mg	Magnesium		0.24 %
K	Potassium		3.08 %
Energy Calculations			100% DM basis
TDN	Total Digestible Nutrients		65.05 %
DE	Digestible Energy		1.86 MCal/kg
NE _m	Net Energy Maintenance		0.67 MCal/lb
NE _g	Net Energy Gain		0.40 MCal/lb
NE _l	Net Energy Lactation		0.66 MCal/lb
Components			Wet Chemistry
pH	Ensiled		pH
NO ₃	Nitrates		ppm ²
Calculated Parameters ³			Scale
RFQ	Relative Forage Quality		108
RFV	Relative Feed Value		0

² ppm = mg/kg

³ Relative Forage Quality (RFQ) is reported for all grass, mixed, legume hays and hayages; 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.

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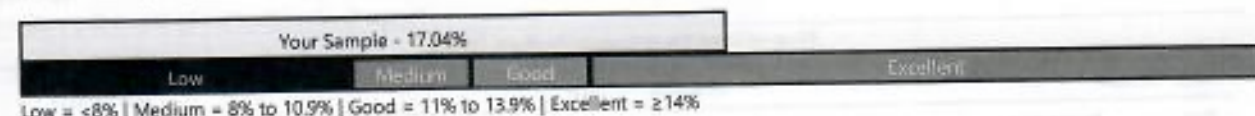
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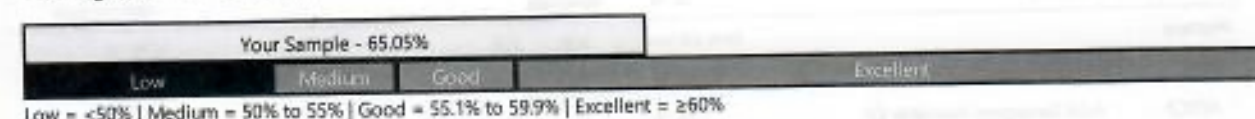
Understanding Hay Quality

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 utbaes.com.

Crude Protein (CP)



Total Digestible Nutrients (TDN)



Wet Chemistry

Minerals		as received
Ca	Calcium	%
P	Phosphorus	%
Mg	Magnesium	%
K	Potassium	%
S	Sulfur	%
Cu	Copper	ppm ¹
Zn	Zinc	ppm
Mn	Manganese	ppm
Fe	Iron	ppm
B	Boron	ppm

¹ ppm = mg/kg

Payment Details

Receipt:
Amount: \$37.00
Method: 107
Payment Date: 10/17/2025