



# Forage Analysis Report

**GREGORY MOCK****157 ETT BROWN ROAD****DEER LODGE, TN 37726**

County: Morgan

Email: GDM1951@GMAIL.COM

Sample ID: Chicken House OG

Lab Number: 117250

Reported: 11/17/2025

Type: Hay

Forage Species (Identified by Client): Orchardgrass

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

<b>Water Content</b>		<i>as received</i>
DM	Dry Matter	89 %
Moisture	Moisture	11 %
<b>Protein</b>		<i>100% DM basis</i>
CP	Crude Protein	15.78 %
ADICP	Acid Detergent Insoluble CP	0.92 %
NDICP	Neutral Detergent Insoluble CP	3.51 %
InsolCP	Insoluble Crude Protein	10.63 %
Lysine	Lysine	0.55 %
<b>Fiber</b>		<i>100% DM basis</i>
ADF	Acid Detergent Fiber	30.91 %
NDF	Neutral Detergent Fiber	57.40 %
Lignin	Lignin	4.07 %
<b>Carbohydrates</b>		<i>100% DM basis</i>
ESC	Sugar	7.12 %
Fructan	Fructan	2.18 %
Starch	Starch	0.86 %
WSC	Water Soluble Carbohydrates	9.44 %
NSC	Non-Structural Carbohydrates	10.30 %
NFC	Non-Fiber Carbohydrates	17.71 %
<b>Digestibility</b>		<i>100% DM basis</i>
IVTDMD48h	<i>in-vitro</i> True DM Digestibility 48h	79.72 %
NDFD48h	Neutral Detergent Fiber Digestibility 48h	63.00 %

<b>Fat</b>		<i>100% DM basis</i>
Fat	Fat	3.67 %
<b>Minerals</b>		<i>100% DM basis</i>
Ash	Ash	5.44 %
Ca	Calcium	0.47 %
P	Phosphorus	0.32 %
Mg	Magnesium	0.25 %
K	Potassium	2.38 %
<b>Energy Calculations</b>		<i>100% DM basis</i>
TDN	Total Digestible Nutrients	66.23 %
DE	Digestible Energy	1.87 MCal/kg
NE <sub>m</sub>	Net Energy Maintenance	0.69 MCal/lb
NE <sub>g</sub>	Net Energy Gain	0.42 MCal/lb
NE <sub>l</sub>	Net Energy Lactation	0.68 MCal/lb
<b>Components</b>		<i>Wet Chemistry</i>
pH	Ensiled	pH
NO <sub>3</sub>	Nitrates	ppm <sup>2</sup>
<b>Calculated Parameters</b> <sup>3</sup>		<i>Scale</i>
RFQ	Relative Forage Quality	113
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

GREGORY MOCK

157 ETT BROWN ROAD

DEER LODGE, TN 37726

County: Morgan

Email: GDM1951@GMAIL.COM

Sample ID: Chicken House OG

Lab Number: 117250

Reported: 11/17/2025

Type: Hay

Forage Species (Identified by Client): Orchardgrass

## 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	%
P	Phosphorus	%
Mg	Magnesium	%
K	Potassium	%
S	Sulfur	%
Cu	Copper	ppm <sup>1</sup>
Zn	Zinc	ppm
Mn	Manganese	ppm
Fe	Iron	ppm
B	Boron	ppm

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

Payment Details	
Receipt:	
Amount:	\$17.00
Method:	151
Payment Date:	11/6/2025