



Forage Analysis Report

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

County: Morgan

Email: GDM1951@GMAIL.COM

Sample ID: Nathan OG

Lab Number: 117248

Reported: 11/17/2025

Type: Hay

Forage Species (Identified by Client): Orchardgrass

Near-Infrared Spectroscopy Analysis (NIRS)¹

Water Content		<i>as received</i>
DM	Dry Matter	88 %
Moisture	Moisture	12 %
Protein		<i>100% DM basis</i>
CP	Crude Protein	17.65 %
ADICP	Acid Detergent Insoluble CP	1.02 %
NDICP	Neutral Detergent Insoluble CP	3.80 %
InsolCP	Insoluble Crude Protein	11.75 %
Lysine	Lysine	0.61 %
Fiber		<i>100% DM basis</i>
ADF	Acid Detergent Fiber	30.27 %
NDF	Neutral Detergent Fiber	55.94 %
Lignin	Lignin	4.51 %
Carbohydrates		<i>100% DM basis</i>
ESC	Sugar	6.82 %
Fructan	Fructan	2.38 %
Starch	Starch	1.77 %
WSC	Water Soluble Carbohydrates	9.24 %
NSC	Non-Structural Carbohydrates	11.01 %
NFC	Non-Fiber Carbohydrates	16.03 %
Digestibility		<i>100% DM basis</i>
IVTDMD48h	<i>in-vitro</i> True DM Digestibility 48h	80.38 %
NDFD48h	Neutral Detergent Fiber Digestibility 48h	60.00 %

Fat		<i>100% DM basis</i>
Fat	Fat	3.75 %
Minerals		<i>100% DM basis</i>
Ash	Ash	6.63 %
Ca	Calcium	0.53 %
P	Phosphorus	0.30 %
Mg	Magnesium	0.28 %
K	Potassium	2.33 %
Energy Calculations		<i>100% DM basis</i>
TDN	Total Digestible Nutrients	66.90 %
DE	Digestible Energy	1.91 MCal/kg
NE _m	Net Energy Maintenance	0.70 MCal/lb
NE _g	Net Energy Gain	0.43 MCal/lb
NE _l	Net Energy Lactation	0.68 MCal/lb
Components		<i>Wet Chemistry</i>
pH	Ensiled	pH
NO ₃	Nitrates	ppm ²
Calculated Parameters ³		<i>Scale</i>
RFQ	Relative Forage Quality	117
RFV	Relative Feed Value	0

² ppm = mg/kg³ 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.

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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 utbeef.com.

Crude Protein (CP)

Your Sample - 17.65%

Low

Medium

Good

Excellent

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

Total Digestible Nutrients (TDN)

Your Sample - 66.90%

Low

Medium

Good

Excellent

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 ¹
Zn	Zinc		ppm
Mn	Manganese		ppm
Fe	Iron		ppm
B	Boron		ppm

Payment Details

Receipt:

Amount: \$17.00

Method: 151

Payment Date: 11/6/2025

¹ ppm = mg/kg