Lab ID: 118275 Sample Name: S2 ALFALFA ORCH

Forage Analysis Report

Gregory Mock
157 Ett Brown Road
Deer Lodge, TN 37726
gdm1951@gmail.com

University of Tennessee Soil, Plant and Pest Center
5201 Marchant Dr
Nashville, TN 37211
soillab@tennessee.edu | 615-832-5850

SOIL, PLANT & PEST CENTER
UTEXTENSION
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Sample Name: S2 ALFALFA ORCH
Lab Number: 118275
Type (Identified by Client): Hay
Forgage Species (Identified by Client): Alfalfa

Payment Information:
Credit Card ONLINE - $17.00

Report Date: 8/5/2026

Near-Infared Spectroscopy Analysis (NIRS)

Water Content				*as received*
DM	Dry Matter (Final)	88.00	%	
Moisture	Moisture	12.00	%	
Protein				*100% DM basis*
CP	Crude Protein	17.25	%	
ADICP	Acid Detergent Insoluble Crude Protein	1.13	%	
NDICP	Neutral Detergent Insoluble Crude Protein	2.30	%	
InsolCP	Insoluble Crude Protein	10.04	%	
Lysine	Lysine	0.60	%	
Fiber				
ADF	Acid Detergent Fiber	31.95	%	
NDF	Neutral Detergent Fiber	44.02	%	
Lignin	Lignin	6.17	%	
Carbohydrates				
ESC	Sugar	7.11	%	
Fructan	Fructan	2.27	%	
Starch	Starch	2.45	%	
WSC	Water-Soluble Carbohydrates	8.85	%	
NSC	Non-Structural Carbohydrates	11.30	%	
NFC	Non-Fiber Carbohydrates	29.24	%	
Digestibility				
IVTDMD48h	*in-vitro* True DM Digestibility at 48h	80.87	%	
NDFD48h	Neutral Digestible Fiber Digestibility at 48h	54.05	%	
Fat				
Fat	Fat	2.68	%	
Minerals				*100% DM basis*
Ash	Ash	6.81	%	
P	Phosphorus	0.28	%	
K	Potassium	2.08	%	
Ca	Calcium	1.43	%	
Mg	Magnesium	0.29	%	
Energy Calculations				
TDN	Total Digestible Nutrients	65.14	%	

DE	Digestible Energy	1.82	MCal/kg
ME	Metabolizable Energy	1.07	MCal/lb
NE_m	Net-Energy for Maintenance	0.67	MCal/lb
NE_g	Net-Energy for Gain	0.40	MCal/lb
NE_l	Net-Energy for Lactation	0.66	MCal/lb

Nutritive Value Parameters			*Scale*
RFQ	Relative Forage Quality	144	
RFV	Relative Feed Value	135	

- 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. Certification with the National Forage Testing Association.

- For conversions: ppm = mg/kg

- Relative Forage Quality (RFQ) is reported for all grass, mixed, legume hays and haylages.

- Relative Feed Value (RFV) is reported for Alfalfa only.

- No nutritive value parameter scale is available for corn silage.

Forage Analysis Definitions Publication W1341

For more information about your forage analysis, please visit with your local UT/TSU Extension Agent.
