

UW Soil & Forage Analysis Laboratory

2611 East 29th Street
 Marshfield, WI 54449
 Phone 715-387-2523 Fax 715-387-1723

COOPERATIVE EXTENSION
 University of Wisconsin-Extension
 University of Wisconsin-Madison
 Soils Department, Madison, WI

Bucky Badger

Account: 555901
 Date received: 2/1/2010
 Date processed: 2/4/2010

Results also available on-line at <http://uwlab.soils.wisc.edu/reports>
 lab number: 54322 access code: i8ku



PROUDLY USING
 NIRSC EQUATIONS

UW Grain Evaluation

Report Number: 54322 Lab Number: 54322 Sample Description: dry corn
 Material: Shelled or Ear Corn (dry)

Item	Abbreviation	Unit	Result	Method ¹
Dry Matter	DM	% as fed	88.28	WC
Moisture		% as fed	11.72	C
Protein Fractions				
Crude Protein	CP	% DM	8.73	WC
Prolamin Protein		% DM	4.48	WC
Prolamin Protein		% of starch	6.77	C
Fiber Fractions				
Neutral Detergent Fiber	aNDF	% DM	11.75	WC
Starch				
Starch		% DM	66.19	WC
Mean Particle Size*	MPS	microns	1,000	WC
Processing Classification			Fine Grind	C
Relative Grain Quality	RGQ		146	C
Carbohydrates and Fats				
Non Fiber Carbohydrate	NFC	% DM	74.02	C
Non Starch NFC, Sugars + VFAs		% DM	7.83	C
Fat		% DM	4.20	T
Energy Calculations: 2001 NRC				
Total Digestible Nutrients, 1X	TDN	% DM	87.58	C
Net Energy, Lactation, 3X	NEl	Mcals/lb	0.88	C
Net Energy, Maintenance	NE _m	Mcals/lb	0.95	C
Net Energy, Gain	NE _g	Mcals/lb	0.64	C
Metabolizable Energy, 3X	ME	Mcals/lb	1.38	C

Macro Minerals				Micro Minerals			
Phosphorus	P	% DM	NR	Iron	Fe	ppm	NR
Calcium	Ca	% DM	NR	Manganese	Mn	ppm	NR
Potassium	K	% DM	NR	Zinc	Zn	ppm	NR
Magnesium	Mg	% DM	NR	Copper	Cu	ppm	NR
Sodium	Na	% DM	NR				
Chloride	Cl	% DM	NR	Ash		2.00	% DM T
Sulfur	S	% DM	NR				

¹ WC = wet chemistry NR = not requested C = calculated
 NIR = near infrared spectroscopy NA = not available T = tabular value

* Whole corns are assumed to be ground to a mean particle size of 1000 microns.

Methods used for these analyses can be found at <http://uwlab.soils.wisc.edu/procedures.htm>