

**Granite Falls Energy, LLC**  
**Granite Falls, MN**

MINNESOTA VALLEY TESTING LAB REPORT NO: 07-F25594  
 REPORT DATE: 11/20/2007  
 METHOD: AOAC, AACC

**PROXIMATE ANALYSIS, CALCULATED DE, ME AND NE VALUES FOR SWINE, AND MINERAL AND AMINO ACID CONTENT OF DDGS.<sup>1</sup>**

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**Proximate Analysis:**

Dry Matter (%)	Crude Protein (%)	Crude Fat (%)	AH Fat (%)	Crude Fiber (%)	Ash (%)	Starch (%)	Acid Detergent Fiber (%)	Digestible Energy <sup>2</sup> (kcal/kg)	Metabolizable Energy <sup>2</sup> (kcal/kg)	Net Energy <sup>3</sup> (kcal/kg)
87.55	27.30	11.63	ND <sup>4</sup>	7.85	5.07	8.25	10.85	4099	3877	2249

**Mineral Analysis:**

Calcium (%)	Phosphorus (%)	Potassium (%)	Magnesium (%)	Sulfur (%)	Sodium (%)	Chloride (%)	Zinc (ppm)	Manganese (ppm)	Copper (ppm)	Iron (ppm)
0.02	0.80	1.01	0.33	0.61	0.26	0.21	55	11	7	89

**Amino Acid Analysis:**

Arginine (%)	Histidine (%)	Isoleucine (%)	Leucine (%)	Lysine (%)	Methionine (%)	Cystine (%)	Phenylalanine (%)	Threonine (%)	Tryptophan (%)	Valine (%)
1.42	0.80	1.14	3.37	1.09	0.54	0.57	1.58	1.10	0.22	1.51

1 Nutrient values expressed on 100% dry matter basis.

2 DE (for swine) = 4,151 - (122 x % Ash) + (23 x %CP) + (38 x %Fat) - (64 x %Crude Fiber); ME (for swine) = DE x [1.003 - (0.0021 x %CP)], Noblet and Perez (1993).

3 NE (for swine) = 328 + (0.599 x ME) - (15 x %Ash) - (30 x %ADF), Ewan (1989).

4 ND = not determined.



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