

# Certificate of Analysis



Certificate Number: 18-004456

Report Date: March 21, 2018

**Client:**

**ABSOLUTE ENERGY**  
1372 STATE LINE RD  
SAINT ANSGAR IA 50472  
UNITED STATES

**Sample Information:**

**SGS Sample Identification:** MW18-02818.001  
**Client Sample Identification:** CHS WEEK 9  
**Received:** March 14, 2018  
**Sample/Product Type:** Distillers dried grains with solubles

Analysis	Result	Units	L.O.Q.	Method
Hunter L Color	59.10		N/A	ColorFlex User's Guide, Ver. 2.5
Calcium	0.02	%(m/m)	0.0124	AOAC 968.08 (ICP)
Copper	4.43	PPM	0.081	AOAC 968.08 (ICP)
Iron	59.07	PPM	0.2428	AOAC 968.08 (ICP)
Potassium	1.13	%(m/m)	0.0044	AOAC 968.08 (ICP)
Magnesium	0.35	%(m/m)	0.0029	AOAC 968.08 (ICP)
Manganese	11.45	PPM	0.0917	AOAC 968.08 (ICP)
Sodium	0.25	%(m/m)	0.0015	AOAC 968.08 (ICP)
Phosphorus	0.89	%(m/m)	0.0063	AOAC 968.08 (ICP)
Sulfur	0.68	%(m/m)	0.0177	AOAC 968.08 (ICP)
Zinc	46.28	PPM	1.4846	AOAC 968.08 (ICP)
Vomitoxin (DON)	1.488	PPM	0.24	Neogen Veratox (ELISA)

Analysis	As Received	On Dry Matter	Units	Method
Drymatter content	89.14	--	%(m/m)	NFTA 2.2.2.5
Moisture content	10.86	--	%(m/m)	NFTA 2.2.2.5
Crude ash content	4.890	5.485	%(m/m)	AOAC 942.05
Crude Fiber	7.11	7.98	%(m/m)	AOAC 962.09
NDF	24.31	--	%	ANKOM Technology Method 6
Crude Fat	9.07	10.17	%(m/m)	AOAC 2003.06 (Petroleum Ether)
Acid detergent fiber	8.89	9.97	%(m/m)	Calculation
Digestable Energy	1.62	1.82	Mcal/lb	Calculation
Metabolizable Energy	1.39	--	Mcal/lb	Calculation
Net Energy Gain	0.60	0.67	Mcal/lb	Calculation
Net Energy Lactation	0.81	0.90	Mcal/lb	Calculation
Net Energy Maintenance	0.89	1.00	Mcal/lb	Calculation
Total digestable nutrients	76.62	85.95	%(m/m)	Calculation
Crude Protein	27.57	30.93	%(m/m)	AOAC 990.03

**Abbreviations:**

**L.O.Q.:** Limit of Quantification    **L.O.D.:** Limit of Detection    **N/A:** Not Applicable    **N.D.:** Not Detected

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The sample condition upon arrival was acceptable for testing unless otherwise noted.

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