

# Certificate of Analysis



Certificate Number: 18-009462

Report Date: June 19, 2018

**Client:**

**ABSOLUTE ENERGY**  
1372 STATE LINE ROAD

IA 50472

UNITED STATES

**Sample Information:**

**SGS Sample Identification:** MW18-06347.001  
**Client Sample Identification:** MOD DDGS JUNE 5, 2018  
**Received:** June 08, 2018  
**Sample/Product Type:** Modified Distiller Dried Grains

Analysis	Result	Units	L.O.Q.	Method
Aflatoxin B1	N.D.	PPB	1	LC/MS/MS
Aflatoxin B2	N.D.	PPB	1	LC/MS/MS
Aflatoxin G1	N.D.	PPB	1	LC/MS/MS
Aflatoxin G2	N.D.	PPB	1	LC/MS/MS
Aflatoxin Summation	N.D.	PPB	1	LC/MS/MS
DON (Vomitoxin)	0.83	PPM	0.1	LC/MS/MS
Fumonisin B1	N.D.	PPM	0.1	LC/MS/MS
Fumonisin B2	N.D.	PPM	0.1	LC/MS/MS
Ochratoxin	N.D.	PPB	1	LC/MS/MS
T2 toxin	N.D.	PPB	10	LC/MS/MS
Zearalenone	N.D.	PPB	20	LC/MS/MS
Calcium	N.D.	%(m/m)	0.0124	AOAC 968.08 (ICP)
Copper	2.39	PPM	0.081	AOAC 968.08 (ICP)
Iron	32.57	PPM	0.2428	AOAC 968.08 (ICP)
Potassium	0.51	%(m/m)	0.0044	AOAC 968.08 (ICP)
Magnesium	0.15	%(m/m)	0.0029	AOAC 968.08 (ICP)
Manganese	5.36	PPM	0.0917	AOAC 968.08 (ICP)
Sodium	0.10	%(m/m)	0.0015	AOAC 968.08 (ICP)
Phosphorus	0.42	%(m/m)	0.0063	AOAC 968.08 (ICP)
Sulfur	0.29	%(m/m)	0.0177	AOAC 968.08 (ICP)
Zinc	26.07	PPM	1.4846	AOAC 968.08 (ICP)

Analysis	As Received	On Dry Matter	Units	Method
Starch Content	0.818	1.651	g/100g	AOAC996.11
Drymatter content	49.52	--	%(m/m)	NFTA 2.2.2.5
Moisture content	50.48	--	%(m/m)	NFTA 2.2.2.5
Crude Fiber	3.95	7.97	%(m/m)	AOAC 962.09
Crude ash content	2.061	4.163	%(m/m)	AOAC 942.05
NDF	20.71	--	%	ANKOM Technology Method 6
Crude Fat	3.83	7.74	%(m/m)	AOAC 2003.06 (Petroleum Ether)

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and/or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

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

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Analysis	As Received	On Dry Matter	Units	Method
Crude Protein	17.38	35.09	%(m/m)	AOAC 990.03
Acid detergent fiber	4.94	9.97	%(m/m)	Calculation
Digestible Energy	0.90	1.82	Mcal/lb	Calculation
Metabolizable Energy	0.76	--	Mcal/lb	Calculation
Net Energy Gain	0.33	0.67	Mcal/lb	Calculation
Net Energy Lactation	0.45	0.90	Mcal/lb	Calculation
Net Energy Maintenance	0.50	1.00	Mcal/lb	Calculation
Total digestible nutrients	42.56	85.96	%(m/m)	Calculation

**Abbreviations:**

**L.O.Q.:** Limit of Quantification

**L.O.D.:** Limit of Detection

**N/A:** Not Applicable

**N.D.:** Not Detected

Jacob Swanson

Analytical Chemistry Supervisor

**Start/End Analysis:** 06/08/2018 - 06/18/2018

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