

Certificate of Analysis



Certificate Number: 18-001023

Report Date: January 19, 2018

Client:

ABSOLUTE ENERGY
1372 STATE LINE ROAD

IA 50472

UNITED STATES

Sample Information:

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SGS Sample Identification: MW18-00257.001
Client Sample Identification: MDDG - JAN 3, 2018
Received: January 08, 2018
Sample/Product Type: Modified Distiller Dried Grains

Analysis	Result	Units	L.O.Q.	Method
Calcium content as received	N.D.	%(m/m)	0.0124	AOAC 968.08 (ICP)
Copper content as received	2.43	PPM	0.081	AOAC 968.08 (ICP)
Iron content as received	35.12	PPM	0.2428	AOAC 968.08 (ICP)
Potassium content as received	0.54	%(m/m)	0.0044	AOAC 968.08 (ICP)
Magnesium content as received	0.16	%(m/m)	0.0029	AOAC 968.08 (ICP)
Manganese content as received	5.99	PPM	0.0917	AOAC 968.08 (ICP)
Sodium content as received	0.12	%(m/m)	0.0015	AOAC 968.08 (ICP)
Phosphorous content as received	0.46	%(m/m)	0.0063	AOAC 968.08 (ICP)
Sulfur content as received	0.35	%(m/m)	0.0177	AOAC 968.08 (ICP)
Zinc content as received	25.79	PPM	1.4846	AOAC 968.08 (ICP)
Aflatoxin B1	N.D.	PPB	0.1	LC/MS/MS
Aflatoxin B2	N.D.	PPB	0.03	LC/MS/MS
Aflatoxin G1	N.D.	PPB	0.1	LC/MS/MS
Aflatoxin G2	N.D.	PPB	0.03	LC/MS/MS
Aflatoxin Summation	0.0	PPB	N/A	LC/MS/MS
DON (Vomitoxin)	0.57	PPM	0.24	LC/MS/MS
Fumonisin B1	N.D.	PPM	0.08	LC/MS/MS
Fumonisin B2	N.D.	PPM	0.08	LC/MS/MS
Ochratoxin	N.D.	PPB	8	LC/MS/MS
T2 toxin	N.D.	PPB	8	LC/MS/MS
Zearalenone	N.D.	PPB	8	LC/MS/MS

Analysis	As Received	On Dry Matter	Units	Method
Drymatter content	49.18	--	%(m/m)	NFTA 2.2.2.5
Moisture content	50.82	--	%(m/m)	NFTA 2.2.2.5
Crude Fiber	4.08	8.29	%(m/m)	AOAC 962.09
Crude ash content	2.115	4.301	%(m/m)	AOAC 942.05
NDF	16.52	--	%	ANKOM Technology Method 6
Crude Fat	5.08	10.33	%(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	16.61	33.77	%(m/m)	AOAC 990.03
Acid detergent fiber	5.10	10.36	%(m/m)	Calculation
Digestable Energy	0.89	1.81	Mcal/lb	Calculation
Metabolizable Energy	0.78	--	Mcal/lb	Calculation
Net Energy Gain	0.33	0.67	Mcal/lb	Calculation
Net Energy Lactation	0.44	0.90	Mcal/lb	Calculation
Net Energy Maintenance	0.49	1.00	Mcal/lb	Calculation
Total digestable nutrients	42.13	85.65	%(m/m)	Calculation
ADF	7.34	14.93	%	ANKOM Technology Method 5
Starch Content	2.017	4.100	g/100g	AOAC996.11

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: 01/08/2018 - 01/17/2018

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