

Certificate of Analysis



Certificate Number: 18-004535

Report Date: March 22, 2018

Client:

ABSOLUTE ENERGY
1372 STATE LINE ROAD

IA 50472

UNITED STATES

Sample Information:

Page 1 of 2

SGS Sample Identification: MW18-02821.001
Client Sample Identification: MOD DDGS MARCH 12, 2018
Received: March 14, 2018
Sample/Product Type: Modified Distiller Dried Grains

| Analysis | Result | Units | L.O.Q. | Method |
|---------------------|--------|--------|--------|-------------------|
| Aflatoxin B1 | 0.2 | 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 | 0.2 | PPB | N/A | LC/MS/MS |
| DON (Vomitoxin) | 0.53 | PPM | 0.24 | LC/MS/MS |
| Fumonisin B1 | 0.10 | 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 |
| Calcium | N.D. | %(m/m) | 0.0124 | AOAC 968.08 (ICP) |
| Copper | 4.89 | PPM | 0.081 | AOAC 968.08 (ICP) |
| Iron | 33.13 | PPM | 0.2428 | AOAC 968.08 (ICP) |
| Potassium | 0.54 | %(m/m) | 0.0044 | AOAC 968.08 (ICP) |
| Magnesium | 0.17 | %(m/m) | 0.0029 | AOAC 968.08 (ICP) |
| Manganese | 5.73 | PPM | 0.0917 | AOAC 968.08 (ICP) |
| Sodium | 0.12 | %(m/m) | 0.0015 | AOAC 968.08 (ICP) |
| Phosphorus | 0.45 | %(m/m) | 0.0063 | AOAC 968.08 (ICP) |
| Sulfur | 0.34 | %(m/m) | 0.0177 | AOAC 968.08 (ICP) |
| Zinc | 26.20 | PPM | 1.4846 | AOAC 968.08 (ICP) |

| Analysis | As Received | On Dry Matter | Units | Method |
|-------------------|-------------|---------------|--------|--------------------------------|
| Starch Content | 1.056 | 2.107 | g/100g | AOAC996.11 |
| Drymatter content | 50.09 | -- | %(m/m) | NFTA 2.2.2.5 |
| Moisture content | 49.91 | -- | %(m/m) | NFTA 2.2.2.5 |
| Crude Fiber | 4.17 | 8.33 | %(m/m) | AOAC 962.09 |
| Crude ash content | 2.316 | 4.623 | %(m/m) | AOAC 942.05 |
| NDF | 18.89 | -- | % | ANKOM Technology Method 6 |
| Crude Fat | 4.92 | 9.82 | %(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.

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or

| Analysis | As Received | On Dry Matter | Units | Method |
|----------------------------|-------------|---------------|---------|-------------|
| Crude Protein | 16.86 | 33.66 | %(m/m) | AOAC 990.03 |
| Acid detergent fiber | 5.22 | 10.42 | %(m/m) | Calculation |
| Digestable Energy | 0.91 | 1.81 | Mcal/lb | Calculation |
| Metabolizable Energy | 0.78 | -- | Mcal/lb | Calculation |
| Net Energy Gain | 0.34 | 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 | 42.88 | 85.61 | %(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: 03/14/2018 - 03/20/2018

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.

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or