REPORT NUMBER
19-253-4115 v2

REPORT DATE
Sep 10, 2019

SEND TO
20151

RECEIVED DATE
Sep 03, 2019

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ISSUE DATE
Sep 10, 2019

BIO-MASS RENEWABLE TECH INC
JEFF BURESH
PO BOX 242
LADORA IA 52251

REPORT OF ANALYSIS

For: (20151) BIO-MASS RENEWABLE TECH INC
DECarbon

Analysis	Level Found As Received	Units	Reporting Limit	Method	Analyst-Date	Verified-Date
Sample ID: **DECarbon** Lab Number: **8669969** Date Sampled: **2019-08-28 1500**						
Nitrogen (total)	1.18	%	0.01	MWL WC PROC 55	hns0-2019/09/05	asl4-2019/09/05
Phosphate (P2O5)	0.55	%	0.10	MWL ME PROC 26	Auto-2019/09/05	asl4-2019/09/05
Potash (K2O)	n.d.	%	0.05	MWL ME PROC 26	Auto-2019/09/05	asl4-2019/09/05
Boron (total)	n.d.	ppm	100	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Sulfur (total)	0.11	%	0.05	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Magnesium (total)	0.08	%	0.01	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Sodium (total)	0.11	%	0.01	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Iron (total)	158	ppm	50.0	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Calcium (total)	0.44	%	0.01	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Manganese (total)	n.d.	ppm	20.0	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Copper (total)	n.d.	ppm	20.0	MWL ME PROC 26	trh1-2019/09/04	asl4-2019/09/05
Mercury (total)	n.d.	mg/kg	0.05	EPA 7471	ccm2-2019/09/05	trh1-2019/09/09
Zinc (total)	7.3	mg/kg	2.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Selenium (total)	n.d.	mg/kg	5.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Lead (total)	n.d.	mg/kg	5.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Nickel (total)	1.7	mg/kg	1.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Molybdenum (total)	n.d.	mg/kg	1.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Cobalt (total)	n.d.	mg/kg	1.00	EPA 6010	ery3-2019/09/05	trh1-2019/09/09
Cadmium (total)	n.d.	mg/kg	0.50	EPA 6010	ery3-2019/09/05	trh1-2019/09/09

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

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REPORT OF ANALYSIS

For: (20151) BIO-MASS RENEWABLE TECH INC
DECarbon

Analysis	Level Found As Received	Units	Reporting Limit	Method	Analyst-Date	Verified-Date
Sample ID: DECarbon Lab Number: **8669969** (con't)						
Arsenic (total)	n.d.	mg/kg	5.0	EPA 6010	ery3-2019/09/05	trh1-2019/09/09

Sample(s) was prepared for EPA 6010 analysis by EPA 3050b.
This report was reissued on 2019-09-10 12:55:07 by raf4 for the following reason:
split report.
All results are reported on an AS RECEIVED basis., n.d. = not detected , ppm = parts per million, ppm = mg/kg

For questions please contact:

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DECarbon

Detailed Method Description(s)

ME 067

Samples are analyzed for mercury using MWL ME 067 which is based upon EPA 7471, cold vapor atomic absorption (CVAA).

Samples are prepared via MWL ME 037 that uses a series of digestion steps involving hot mineral acids and oxidizers so as to destroy organic matter and solubilize mercury. The mercury is reduced by use of stannous chloride to elemental mercury that is then aerated to the light path of a mercury light of an atomic absorption spectrometer (AAS). The absorption of the mercury light at 253.7 nm is then correlated to the level of mercury present in the original sample.

Elemental combustion Nitrogen, Carbon, Hydrogen

Analysis follows MWL WC 055 which is based on AOAC 993.13. Samples are ground to a fine, homogenous consistency and a small amount weighed and introduced into the instrument. The sample is burned in the presence of oxygen to release gases such as carbon dioxide, nitrogen, and hydrogen and the levels of a specific gas determined and reported.

ME 042

Analysis follows MWL ME 042 which is based on EPA 6010b, Inductively Coupled Plasma (ICP). A light emission technique where prepared samples are injected into a high energy plasma that forces the elements in the injected sample to emit light energies which are proportional to the level of minerals and metals present. The light is then detected and correlated to the levels of minerals and metals in the original sample.

ICP Analysis Fertilizers AOAC 985.01 (mod)

Analysis follows MWL ME 026 which is based on AOAC 985.01. Samples have been prepared using MWL WC 056. Total minerals in fertilizers have been prepared by AOAC 957.02 using mineral acids and heat. Water soluble manganese is prepared by AOAC 972.03 and the other water soluble by AOAC 977.01. Sample analysis involves moving the sample extract into the ICP where it is nebulized and introduced into the high temperature plasma which energizes the electrons of the dissolved minerals/metals. As the energized electrons of the minerals/metals return to ground state, energy is released as light. The emitted wavelength(s) and light intensities are used to identify and quantitate the minerals/metals in the sample

AOAC 957.02 (P2O5 preparation)

Samples are treated with hydrochloric acid and nitric acid on a hot plate to destroy organic material and dissolve phosphate.

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DECarbon

Fertilizer Prep AOAC 957.02

Samples are prepared using a combination of nitric acid and heat. The heating takes place in a block digestor