

NRG Energy
Morgantown Generating Station
12620 Crain Hwy.
Newburg, Maryland 20620

Certified Mail/Return Receipt Requested
7013 2630 0000 0547 0329

February 24, 2014

Ms. Martha Hynson
Maryland Department of the Environment
Land Management Administration
1800 Washington Boulevard, Suite 605
Baltimore MD 21230-1719

Re: 2014 CCB Tonnage Report for GenOn Mid-Atlantic, LLC's Morgantown
Generating Station.

Dear Ms. Hynson,

Pursuant to COMAR 26.04.10.08, enclosed please find the 2014 CCB Tonnage
Report for GenOn Mid-Atlantic, LLC's Morgantown Generating Station.

If you have any questions regarding this report, please contact Debra Knight at
301-843-4670 or at debra.knight@nrg.com.

NRG Energy, Inc. (NRG) and GenOn Energy, Inc. (GenOn) merged on December
14, 2012 and retained the name NRG Energy, Inc. As a result, all GenOn entities
are wholly owned subsidiaries of NRG. Although the parent corporations, NRG and
GenOn, have merged, the entities have not merged or changed names.

Regards,

Thomas G. Turk
General Manager

SOLID WASTE
PROGRAM

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Solid Waste Program
1800 Washington Boulevard • Suite 605 • Baltimore, Maryland 21230-1719
410-537-3315 • 800-633-6101 x3315 • www.mde.maryland.gov

Coal Combustion Byproducts (CCBs) Annual Generator Tonnage Report Instructions for Calendar Year 2014

The following is general information relating to the requirement for reporting quantities of coal combustion byproducts (CCBs) that were managed in the State of Maryland during calendar year 2014. Please answer the questions on the form provided, attaching additional information and any requested supplemental information to the back of the form. *Note that the form for this year requires both volume and weight of the CCBs produced. If you know one of these parameters but not the others, for example, you have the tonnage produced but not the volume, you may calculate the other parameter; however, please provide the calculations and assumptions that you used in your estimate.* Questions can be directed to the Solid Waste Program at (410) 537-3315 or via email at edexter@maryland.gov.

I. Background. This requirement that generators of CCBs submit an annual report was instituted in the Code of Maryland Regulations COMAR 26.04.10.08, that was promulgated effective December 1, 2008. The regulation requires that any non-residential generator of CCBs submit a report to the Department by March 1 of each year describing the manner in which CCBs generated within the State were managed during the preceding calendar year. Additional information and specific instructions follow. For more detailed information, please refer to COMAR 26.04.10.08.

II. General Information and Applicability.

A. Definitions. CCBs are defined in COMAR 26.04.10.02B as:

*“(3) Coal Combustion Byproducts. (a) "Coal combustion byproducts" means the residue generated by or resulting from the burning of coal.
(b) "Coal combustion byproducts" includes fly ash, bottom ash, boiler slag, pozzolan, and other solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal burning furnaces and boilers, including flue gas desulfurization sludge and other solid residuals recovered from flue gas by wet or dry methods.”*

A generator of CCBs is defined in COMAR 26.04.10.02B as:

*“(9) Generator.
(a) "Generator" means a person whose operations, activities, processes, or actions create coal combustion byproducts.
(b) "Generator" does not include a person who only generates coal combustion byproducts by burning coal at a private residence.”*

B. Applicability. If you or your company meets the definition of a generator of CCBs as defined above, you must provide the information as required below. For the purposes of this report, “you” shall hereinafter refer to the generator defined above. Please note that COMAR 26.04.10.08 requires generators of CCBs to submit an annual report to the Department concerning the disposition of the CCBs that they generated the previous year. **THIS INCLUDES CCBs THAT WERE NOT SEPARATELY COLLECTED BUT WERE PRODUCED BY THE BURNING OF COAL AND WERE DIRECTLY CONTRIBUTED TO A PRODUCT, such as cement.** Where the amount cannot be directly measured, estimates based on the amount of coal burned can be used. The method of determining the volume of CCBs produced must be described.

III. Required Information. The following information must be provided to the Department by March 1, 2015:

A. Contact information:

Facility Name: Morgantown Generating Station

Name of Permit Holder: GenOn Mid-Atlantic, LLC

Facility Address: 12620 Crain Highway
Street

Facility Address: Newburg Maryland 20664
City State Zip

County: Charles

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 301-843-4670 Facility Fax No.: 301-843-4552

Contact Name: Debra Knight

Contact Title: Senior Environmental Specialist

Contact Address: 12620 Crain Highway
Street

Contact Address: Newburg Maryland 20664
City State Zip

Contact Email: debra.knight@nrg.com

Contact Telephone No.: 301-843-4670 Contact Fax No.: 301-843-4552

For questions on how to complete this form, please contact the Solid Waste Program at 410-537-3315

B. A description of the process that generates the CCBs, including the type of coal or other raw material that generates the CCBs. If the space provided is insufficient, please attach additional pages:

See Attachment A.

C. The volume and weight of CCBs generated during calendar year 2014, including an identification of the different types of CCBs generated and the volume of each type generated. If the space provided is insufficient, please attach additional pages in a similar format. If converting from volume to weight or weight to volume, please provide your calculations and assumptions.

Table I: Volume and Weight of CCBs Generated for Calendar Year 2014: Please note the change to this table from previous years, to include both the volume and weight of the types of CCBs your facility produces.

Volume and Weight of CCBs Generated for Calendar Year 2014				
<u>Flyash</u> Type of CCB	<u>Bottom Ash</u> Type of CCB	<u>On-Spec Gypsum</u> Type of CCB	<u>Off Spec Gypsum</u> Type of CCB	<u>WWTP Fines</u> Type of CCB
129,901	38,802	120,759	1,138	1,610
Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
129,901	38,802	235,895	2,223	3,145
Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes:

CCB Tonnages are reported in dry short tons. CCB volumes are reported in dry Cubic Yards.

WWTP Tons represent fines from the Flue Gas Desulfurization's Waste Water Treatment

Volumes of Flyash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0 Tons/Dry CY.

Volumes of Bottom Ash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0 Tons/Dry CY.

Volumes of On-Spec Gypsum, Off-Spec Gypsum and WWTP Fines are calculated from dry short tons using a density of 1.95 Tons/Dry CY.

D. Descriptions of any modeling or risk assessments, or both, conducted relating to the CCBs or their use that were performed by you or your company during the reporting year. Please attach this information to the report.

E. Copies of all laboratory reports of all chemical characterizations of the CCBs. Please attach this information to the report.

F. A description of how you disposed of or used your CCBs in calendar year 2014, identifying:

(a) The types and volume of CCBs disposed of or used (if different than described in Paragraph C above) including any CCBs stored during the previous calendar year, the location of disposal, mine reclamation and use sites, and the type and volume of CCBs disposed of or used at each site:

FLYASH: A total of 129,901 tons of flyash were generated at Morgantown in 2014, and 6,427 tons were stored on site at the end of 2013. Of this ash, 122,862 tons were sold to SEFA, headquartered in Columbia, SC, 6,636 tons were disposed of at the Brandywine Ash Site, located in Brandywine, Md, and 6,830 tons were stored on-site at the STAR Facility ash storage dome for future sale at the end of 2014.

BOTTOM ASH: Of the 38,802 tons of bottom ash generated in 2014, 2,143 tons were sold to SEFA, headquartered in Columbia, SC, and 36,659 tons were disposed of at the Brandywine Ash Site, located in Brandywine, Md.

On-Spec Gypsum: 235,895 tons of On-Spec Gypsum were generated at Morgantown in 2014, and 7,315 tons were stored on-site at the end of 2013. Of this total, 233,115 tons were transported by barge to LaFarge, located in Buchanan, NY for use in the manufacture of wallboard, and a total of 10,095 tons were stored on site at the end of 2014.

Off-Spec Gypsum generated in 2014 was 2,223 tons, all of which was disposed of at Waste Management's Amelia Landfill located in Jetersville, Va.

WWTP Fines produced in 2014 was 3,145 tons, all of which was disposed of at Waste Management's Amelia Landfill located in Jetersville, Va.

and (b) The different uses by type and volume of CCBs:

FlyAsh:

Volume: 122,862 tons sold

Uses:

1) 122,862 tons used as a Supplementary cementitious material for concrete and concrete products, 28,768 tons of which were used in Md.

Bottom Ash:

Volume: 2,143 tons sold,

Uses: 2,143 tons used as aggregate for block and concrete products, all of which was applied to a beneficial use in Md.

On-Spec Gypsum:

Volume: 233,115 tons sold

Use: Wallboard

If the space provided is insufficient, please attach additional pages in a similar format.

G. A description of how you intend to dispose of or use CCBs in the next 5 years, identifying:

(a) The types and volume of CCBs intended to be disposed of or used, the location of intended disposal, mine reclamation and use sites, and the type and volume of CCBs intended to be disposed of or used at each site:

FlyAsh: Approximately 130,000 tons to be generated, with about 123,000 tons to be sold to SEFA, headquartered in Columbia, SC, and 7,000 tons to be sent for disposal at the Brandywine Ash Site, located in Brandywine, Md.

Bottom Ash: Anticipate 39,000 tons to be generated, of which 2,000 will be sold to SEFA, located in Columbia, SC, and 37,000 tons will be disposed of at the Brandywine ash site in Prince George's County, Md. .

On-Spec Gypsum: Anticipate 236,000 tons to be generated of which 233,000 tons to be transported by barge to LaFarge, located in Buchanan, NY, and 3,000 tons to be stored on site at the Morgantown station.

Off-Spec Gypsum: Approximate 2,200 tons to be generated and disposed of at Waste Management's Amelia Landfill located in Jetersville, Va.

WWTP Fines: Approximately 3,100 tons to be generated and disposed of at Waste Management's Amelia Landfill located in Jetersville, Va.

and (b) The different intended uses by type and volume of CCBs.

FlyAsh:

Volume: 123,000 tons to be sold

Uses: 1) All used as a Supplementary cementitious material for concrete and concrete products.

Bottom Ash:

Volume: 2,000 tons to be sold

Uses: All used as aggregate for block and concrete products

On-Spec Gypsum:


Volume: 233,000 tons to be sold

Use: Wallboard

If the space provided is insufficient, please attach additional pages in a similar format.

IV. Signature and Certification. An authorized official of the generator must sign the annual report, and certify as to the accuracy and completeness of the information contained in the annual report:

This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.

	<p><u>Thomas G. Turk, General Manager,</u> <u>Morgantown Generating Station</u> 301-843-4521</p>	<p><u>2/24/15</u></p>
<p>Signature</p>	<p>Name, Title, & Telephone No. (Print or Type)</p> <p>tom.turk@nrg.com</p> <p>Your Email Address</p>	<p>Date</p>

V: Attachments (please list):

A) Morgantown Generating Station Process Description

B) Microbac Report #14J0732: Analyses of Fly Ash, Bottom Ash, Off-Spec Gypsum, and WWTP Fines

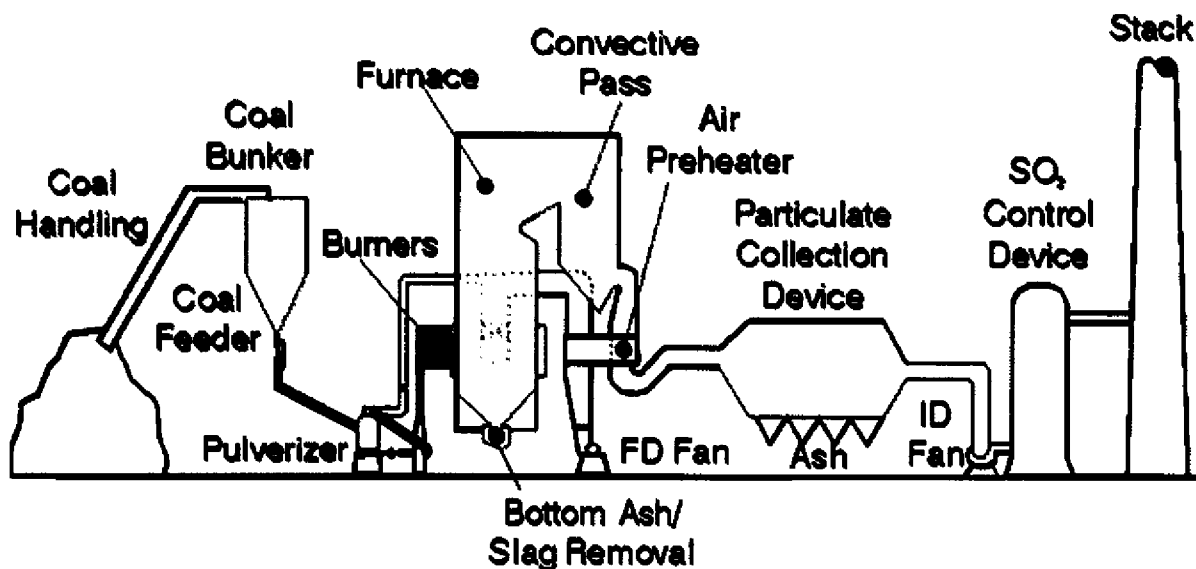
Attachment A

Morgantown Generating Station
12620 Crain Highway,
Newburg, Charles County, MD. 20664
301-843-4600

The Morgantown Generating Station is located on the Potomac River, just south of Rt. 301 at the Harry W. Nice Bridge near the town of Newburg in Charles County, MD. The facility is engaged in the generation of electrical energy for sale. The primary SIC code is 4911. There are two tangentially fired supercritical steam units each firing bituminous coal. Each unit is rated at 640 MWs (base loaded) and each is equipped with a superheater, single reheat, and economizer. Pollution control devices on both units include low NO_x burners with Separated Over-Fired Air (SOFA) and Selective Catalytic Reduction (SCR) for control of oxides of nitrogen (NO_x); and electrostatic precipitators (ESP) for the control of particulate matter. A Wet Scrubber (FGD) was installed and went in service on both units in late 2009. Units 1 & 2 exhausts through the scrubber stack or, when the FGD is not in service, through separate 700 ft. stacks.

Coal is currently delivered by both rail and by barge. The rail cars are emptied using a rotary dumper, then transferred by conveyor and dravo to either a storage pile or fed directly to the units' bunker. The barge unloading facility consists of a dock, an unloader, a transfer system, and a rail loading system and a rail loading facility. The barge unloading transfer and distribution system is integrated into Morgantown's existing coal handling system.

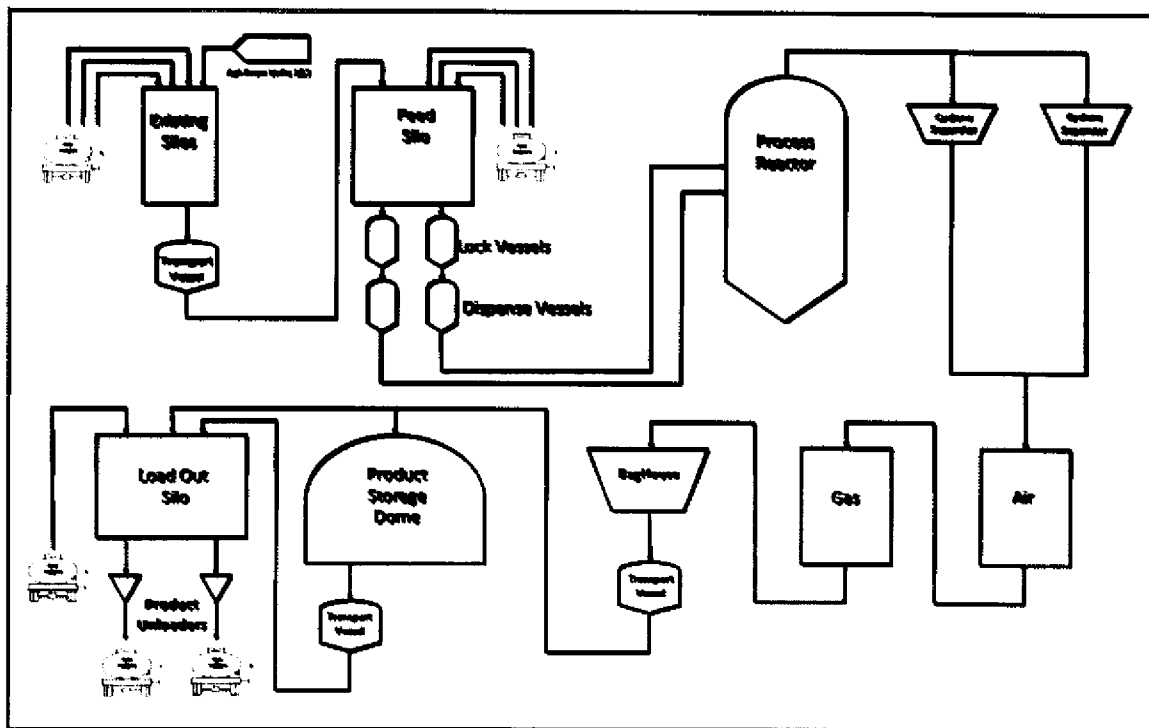
The illustration below shows a simple schematic diagram for a typical pulverized coal combustion system. The coal is prepared by grinding to a very fine consistency for combustion.



Attachment A

The CCBs currently produced and used are a result of the combustion of pulverized coal.

Ash is formed in the boiler while coal combusts. In general, pulverized coal combustion results in approximately 10% ash, of which 65%–90% is fly ash, and the remainder is coarser bottom ash. Bottom ash is a coarse material and falls to the bottom of the boiler. Fly ash is finer than bottom ash and is carried along the combustion process with flue gas. Particulate collection devices remove fly ash from the flue gas and the collected ash is transferred to one of two ash silos. Silo fly ash is either sent to the Staged Turbulent Air Reactor (STAR) facility (which is located on-site) where volatiles are burned off from the ash to make it more marketable or off-loaded for disposal at the Brandywine Ash Site located 29 miles north in Prince Georges County. Ash from the STAR facility is stored in on-site storage silos until it can be sold. A diagram of the STAR process is shown below.



The bottom ash is conveyed out of the bottom of the boiler via a drag chain conveyor. The bottom ash is then either prepared for sale, or sent to the Brandywine Ash Site, where it can be used in the construction of flyash disposal cells.

Gypsum is a byproduct of SO₂ removal by the Flue Gas Desulfurization (FGD) system, commonly known as a scrubber. Morgantown uses wet scrubbers for SO₂ removal. Wet scrubbing uses a slurry of limestone alkaline sorbent to remove SO₂, - as well as some mercury

contaminants - from the air stream. The byproduct - gypsum - is conveyed to a storage dome temporarily and then sent via barge to Buchanan, New York to be made into wallboard. Gypsum that doesn't meet the specifications for wallboard production is transported for disposal to Waste Management's Amelia Landfill in Virginia. Waste Water Treatment Plant Fines (WWTP Fines) are removed from the Scrubber's WWTP as needed and transported to Waste Management's Amelia Landfill in Virginia for disposal.



Microbac Laboratories, Inc.

Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224 •

Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

COVER LETTER

Walter Johnson
NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659
RE: Morgantown-Fly Ash

November 10, 2014
Report No.: 14J0732

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 10/14/2014 16:13.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Certifications/Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

11/10/2014

Final report reviewed by:

Melanie C. Duszynski/Project Manager

Report issue date

All samples received in proper condition and results conform to ISO 17025 and TNI NELAC standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact Melanie C. Duszynski/Project Manager at 410-633-1800. You may also contact Trevor Boyce, President at trevor.boyce@microbac.com



Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800

Fax: 410-633-6553

www.microbac.com

CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
Bottom Ash	14J0732-01	Solid	Grab	10/08/2014 15:30	10/14/2014 16:13
Gypsum	14J0732-02	Solid	Grab	10/08/2014 15:00	10/14/2014 16:13
WWTP Filter Cake	14J0732-03	Solid	Grab	10/08/2014 16:00	10/14/2014 16:13
Unit F1 Flyash	14J0732-04	Solid	Grab	10/09/2014 10:00	10/14/2014 16:13
Unit F2 Flyash	14J0732-05	Solid	Grab	10/09/2014 10:00	10/14/2014 16:13

Microbac Laboratories, Inc. - Baltimore

Melanie C. Duszyński, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Original Report



Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800

Fax: 410-633-6553

www.microbac.com

CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

Bottom Ash

14J0732-01 (Solid) Sampled: 10/08/2014 15:30; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
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Microbac Laboratories, Inc. - Baltimore

Wet Chemistry

% Solids	68.76	0.05	% by Weight		101714 1320	102014 0900	LCR	SM (20) 2540G	
Chloride	21	11	mg/kg dry		102714 1334	102714 2316	BLL	EPA 9056	Z10
pH	9.42	0.100	pH Units		101714 0605	101714 0820	LCR	EPA 9045D	Z10a
Sulfate as SO4	650	11	mg/kg dry		102714 1334	102714 2316	BLL	EPA 9056	

Mercury, Total by EPA 7000 Series Methods

Mercury	ND	0.034	mg/kg dry		101614 1313	101614 1805	FAK	EPA 7471A	
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Metals, Total by EPA 6000/7000 Series Methods

Silver	ND	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Aluminum	18000	17	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Arsenic	ND	6.9	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Boron	68	35	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Barium	110	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Beryllium	2.0	1.4	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Calcium	5900	35	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Cadmium	ND	0.69	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Cobalt	ND	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Chromium	8.9	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Copper	ND	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Iron	68000	14	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Potassium	2000	35	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Lithium	19	6.9	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Magnesium	690	35	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Manganese	50	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Molybdenum	ND	6.9	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	
Sodium	ND	690	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B	

Microbac Laboratories, Inc. - Baltimore

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Melanie C. Duszynski, Project Manager

Original Report

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Baltimore Division

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

Bottom Ash

14J0732-01 (Solid) Sampled: 10/08/2014 15:30; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Metals, Total by EPA 6000/7000 Series Methods

Nickel	ND	6.9	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B
Lead	ND	6.9	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B
Antimony	ND	14	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B
Thallium	ND	14	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B
Vanadium	29	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B
Zinc	6.1	3.5	mg/kg dry		102014 1334	102214 1742	APS	EPA 6010B

TCLP Extraction by EPA 1311

TCLP Extraction	COMPLETED		N/A		101614 1904	102014 1430	TRB	EPA 1311
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TCLP Metals by 6000/7000 Series Methods

Silver	ND	0.20	mg/L	5.0	102014 1033	102114 1708	APS	EPA 6010B
Arsenic	ND	0.20	mg/L	5.0	102014 1033	102114 1708	APS	EPA 6010B
Barium	ND	0.50	mg/L	100	102014 1033	102114 1708	APS	EPA 6010B
Cadmium	ND	0.20	mg/L	1.0	102014 1033	102114 1708	APS	EPA 6010B
Chromium	ND	0.20	mg/L	5.0	102014 1033	102114 1708	APS	EPA 6010B
Mercury	ND	0.0020	mg/L	0.20	102014 1504	102114 1748	FAK	EPA 7470A
Lead	ND	0.20	mg/L	5.0	102014 1033	102114 1708	APS	EPA 6010B
Selenium	ND	0.20	mg/L	1.0	102014 1033	102114 1708	APS	EPA 6010B

Microbac Laboratories, Inc. - Chicagoland

Metals

Sulfur	840	5.0	mg/Kg		110714 0942	110714 1552	AG	SW-846 6010B
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Microbac Laboratories, Inc. - Baltimore

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Melanie C. Duszynski, Project Manager

Original Report

Page 4 of 17

CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown

Mirant-Ryceville, 13970 Ryceville Rd

Mechanicsville, MD 20659

Project: Morgantown-Fly Ash

Project Number: Morgantown-Fly Ash

Project Manager: Walter Johnson

Report: 14J0732

Reported: 11/10/2014 21:40

Gypsum
14J0732-02 (Solid) Sampled: 10/08/2014 15:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
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Microbac Laboratories, Inc. - Baltimore
Wet Chemistry

% Solids	76.03	0.05	% by Weight		101714 1320	102014 0900	LCR	SM (20) 2540G	
Chloride	35	9.4	mg/kg dry		102714 1334	102714 2353	BLL	EPA 9056	
pH	6.23	0.100	pH Units		101714 0605	101714 0820	LCR	EPA 9045D	Z10b
Sulfate as SO4	14000	240	mg/kg dry		102714 1334	102814 0913	BLL/P	EPA 9056	

Mercury, Total by EPA 7000 Series Methods

Mercury	0.52	0.031	mg/kg dry		101614 1313	101614 1806	FAK	EPA 7471A	
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Metals, Total by EPA 6000/7000 Series Methods

Silver	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Aluminum	300	15	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Arsenic	ND	6.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Boron	ND	30	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Barium	22	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Beryllium	ND	1.2	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Calcium	260000	300	mg/kg dry		102014 1334	102314 0909	APS	EPA 6010B	
Cadmium	ND	0.60	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Cobalt	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Chromium	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Copper	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Iron	400	12	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Potassium	130	30	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Lithium	ND	6.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Magnesium	ND	300	mg/kg dry		102014 1334	102314 0909	APS	EPA 6010B	
Manganese	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Molybdenum	ND	6.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Sodium	ND	600	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Nickel	ND	6.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown Mirant-Ryceville, 13970 Ryceville Rd Mechanicsville, MD 20659	Project: Morgantown-Fly Ash Project Number: Morgantown-Fly Ash Project Manager: Walter Johnson	Report: 14J0732 Reported: 11/10/2014 21:40
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Gypsum

14J0732-02 (Solid) Sampled: 10/08/2014 15:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
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Microbac Laboratories, Inc. - Baltimore

Metals, Total by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
Lead	ND	6.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Antimony	ND	12	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Thallium	ND	12	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Vanadium	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	
Zinc	ND	3.0	mg/kg dry		102014 1334	102214 1746	APS	EPA 6010B	

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
TCLP Extraction	COMPLETED			N/A	101614 1904	102014 1430	TRB	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
Silver	ND	0.20	mg/L	5.0	102014 1033	102114 1720	APS	EPA 6010B	
Arsenic	ND	0.20	mg/L	5.0	102014 1033	102114 1720	APS	EPA 6010B	
Barium	ND	0.50	mg/L	100	102014 1033	102114 1720	APS	EPA 6010B	
Cadmium	ND	0.20	mg/L	1.0	102014 1033	102114 1720	APS	EPA 6010B	
Chromium	ND	0.20	mg/L	5.0	102014 1033	102114 1720	APS	EPA 6010B	
Mercury	ND	0.0020	mg/L	0.20	102014 1504	102114 1755	FAK	EPA 7470A	
Lead	ND	0.20	mg/L	5.0	102014 1033	102114 1720	APS	EPA 6010B	
Selenium	ND	0.20	mg/L	1.0	102014 1033	102114 1720	APS	EPA 6010B	

Microbac Laboratories, Inc. - Chicagoland

Metals

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
Sulfur	97000	98	mg/Kg		110714 0942	111014 1443	AG	SW-846 6010B	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

WWTP Filter Cake

14J0732-03 (Solid) Sampled: 10/08/2014 16:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
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Microbac Laboratories, Inc. - Baltimore

Wet Chemistry

% Solids	58.30	0.05	% by Weight		101714 1320	102014 0900	LCR	SM (20) 2540G	
Chloride	2900	130	mg/kg dry		102714 1334	102814 0925	BLL/P	EPA 9056	
pH	9.00	0.100	pH Units		101714 0605	101714 0820	LCR	EPA 9045D	Z10b
Sulfate as SO4	21000	330	mg/kg dry		102714 1334	102814 0938	BLL/P	EPA 9056	

Mercury, Total by EPA 7000 Series Methods

Mercury	17	0.81	mg/kg dry		101614 1313	101614 1823	FAK	EPA 7471A	
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Metals, Total by EPA 6000/7000 Series Methods

Silver	ND	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Aluminum	11000	21	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Arsenic	49	8.3	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Boron	900	42	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Barium	350	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Beryllium	ND	1.7	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Calcium	210000	420	mg/kg dry		102014 1334	102314 0913	APS	EPA 6010B	
Cadmium	1.4	0.83	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Cobalt	ND	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Chromium	43	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Copper	19	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Iron	16000	17	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Potassium	2800	42	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Lithium	ND	8.3	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Magnesium	13000	420	mg/kg dry		102014 1334	102314 0913	APS	EPA 6010B	
Manganese	550	4.2	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Molybdenum	ND	8.3	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Sodium	ND	830	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	
Nickel	49	8.3	mg/kg dry		102014 1334	102214 1751	APS	EPA 6010B	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown Mirant-Ryceville, 13970 Ryceville Rd Mechanicsville, MD 20659	Project: Morgantown-Fly Ash Project Number: Morgantown-Fly Ash Project Manager: Walter Johnson	Report: 14J0732 Reported: 11/10/2014 21:40
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WWTP Filter Cake

14J0732-03 (Solid) Sampled: 10/08/2014 16:00; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Metals, Total by EPA 6000/7000 Series Methods

Analyte	Result	Limit	Units	Prepared	Analyzed	Analyst	Method
Lead	14	8.3	mg/kg dry	102014 1334	102214 1751	APS	EPA 6010B
Antimony	ND	17	mg/kg dry	102014 1334	102214 1751	APS	EPA 6010B
Thallium	ND	17	mg/kg dry	102014 1334	102214 1751	APS	EPA 6010B
Vanadium	43	4.2	mg/kg dry	102014 1334	102214 1751	APS	EPA 6010B
Zinc	50	4.2	mg/kg dry	102014 1334	102214 1751	APS	EPA 6010B

TCLP Extraction by EPA 1311

TCLP Extraction	Result	Limit	Units	Prepared	Analyzed	Analyst	Method
TCLP Extraction	COMPLETED	N/A		101614 1904	102014 1430	TRB	EPA 1311

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Limit	Units	Prepared	Analyzed	Analyst	Method
Silver	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Arsenic	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Barium	ND	0.50	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Cadmium	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Chromium	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Mercury	ND	0.0020	mg/L	102014 1504	102114 1756	FAK	EPA 7470A
Lead	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B
Selenium	ND	0.20	mg/L	102014 1033	102114 1724	APS	EPA 6010B

Microbac Laboratories, Inc. - Chicagoland

Metals

Analyte	Result	Limit	Units	Prepared	Analyzed	Analyst	Method
Sulfur	78000	97	mg/Kg	110714 0942	111014 1448	AG	SW-846 6010B

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Melanie C. Duszynski

Melanie C. Duszynski, Project Manager

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Fax: 410-633-6553

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

Unit F1 Flyash

14J0732-04 (Solid) Sampled: 10/09/2014 10:00; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Wet Chemistry

% Solids	100.0	0.05	% by Weight	101714 1320	102014 0900	LCR	SM (20) 2540G	
Chloride	ND	7.5	mg/kg dry	102714 1334	102814 0018	BLL	EPA 9056	
pH	4.56	0.100	pH Units	101714 0605	101714 0820	LCR	EPA 9045D	Z10b
Sulfate as SO4	7500	190	mg/kg dry	102714 1334	102814 1002	BLL/P	EPA 9056	

Mercury, Total by EPA 7000 Series Methods

Mercury	0.32	0.025	mg/kg dry	101614 1313	101614 1816	FAK	EPA 7471A	
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Metals, Total by EPA 6000/7000 Series Methods

Silver	ND	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Aluminum	22000	11	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Arsenic	99	4.5	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Boron	300	22	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Barium	210	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Beryllium	4.7	0.90	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Calcium	12000	22	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Cadmium	1.9	0.45	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Cobalt	ND	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Chromium	49	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Copper	34	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Iron	42000	9.0	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Potassium	2500	22	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Lithium	34	4.5	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Magnesium	1200	22	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Manganese	65	2.2	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Molybdenum	9.9	4.5	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Sodium	1100	450	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	
Nickel	ND	4.5	mg/kg dry	102014 1334	102214 1755	APS	EPA 6010B	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

Unit F1 Flyash

14J0732-04 (Solid) Sampled: 10/09/2014 10:00; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Metals, Total by EPA 6000/7000 Series Methods

Lead	25	4.5	mg/kg dry		102014 1334	102214 1755	APS	EPA 6010B
Antimony	ND	9.0	mg/kg dry		102014 1334	102214 1755	APS	EPA 6010B
Thallium	ND	9.0	mg/kg dry		102014 1334	102214 1755	APS	EPA 6010B
Vanadium	130	2.2	mg/kg dry		102014 1334	102214 1755	APS	EPA 6010B
Zinc	64	2.2	mg/kg dry		102014 1334	102214 1755	APS	EPA 6010B

TCLP Extraction by EPA 1311

TCLP Extraction	COMPLETED		N/A		101614 1904	102014 1430	TRB	EPA 1311
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TCLP Metals by 6000/7000 Series Methods

Silver	ND	0.20	mg/L	5.0	102014 1033	102114 1728	APS	EPA 6010B
Arsenic	ND	0.20	mg/L	5.0	102014 1033	102114 1728	APS	EPA 6010B
Barium	ND	0.50	mg/L	100	102014 1033	102114 1728	APS	EPA 6010B
Cadmium	ND	0.20	mg/L	1.0	102014 1033	102114 1728	APS	EPA 6010B
Chromium	ND	0.20	mg/L	5.0	102014 1033	102114 1728	APS	EPA 6010B
Mercury	ND	0.0020	mg/L	0.20	102014 1504	102114 1758	FAK	EPA 7470A
Lead	ND	0.20	mg/L	5.0	102014 1033	102114 1728	APS	EPA 6010B
Selenium	ND	0.20	mg/L	1.0	102014 1033	102114 1728	APS	EPA 6010B

Microbac Laboratories, Inc. - Chicagoland

Metals

Sulfur	2600	5.0	mg/Kg		110714 0942	110714 1628	AG	SW-846 6010B
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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown Mirant-Ryceville, 13970 Ryceville Rd Mechanicsville, MD 20659	Project: Morgantown-Fly Ash Project Number: Morgantown-Fly Ash Project Manager: Walter Johnson	Report: 14J0732 Reported: 11/10/2014 21:40
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Unit F2 Flyash

14J0732-05 (Solid) Sampled: 10/09/2014 10:00; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Wet Chemistry

% Solids	100.1	0.05	% by Weight		101714 1320	102014 0900	LCR	SM (20) 2540G	
Chloride	14	6.6	mg/kg dry		102714 1334	102814 0030	BLL	EPA 9056	
pH	4.16	0.100	pH Units		101714 0605	101714 0820	LCR	EPA 9045D	Z10c
Sulfate as SO4	8100	170	mg/kg dry		102714 1334	102814 1015	BLL/P	EPA 9056	

Mercury, Total by EPA 7000 Series Methods

Mercury	0.22	0.023	mg/kg dry		101614 1313	101614 1818	FAK	EPA 7471A	
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Metals, Total by EPA 6000/7000 Series Methods

Silver	ND	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Aluminum	21000	10	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Arsenic	100	4.1	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Boron	310	20	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Barium	190	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Beryllium	4.7	0.82	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Calcium	12000	20	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Cadmium	1.9	0.41	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Cobalt	ND	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Chromium	48	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Copper	20	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Iron	49000	82	mg/kg dry		102014 1334	102314 0917	APS	EPA 6010B	
Potassium	2400	20	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Lithium	32	4.1	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Magnesium	1200	20	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Manganese	65	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Molybdenum	9.2	4.1	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Sodium	1200	410	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	
Nickel	ND	4.1	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B	

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Fax: 410-633-6553

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown

Mirant-Ryceville, 13970 Ryceville Rd

Mechanicsville, MD 20659

Project: Morgantown-Fly Ash

Project Number: Morgantown-Fly Ash

Project Manager: Walter Johnson

Report: 14J0732

Reported: 11/10/2014 21:40

Unit F2 Flyash

14J0732-05 (Solid) Sampled: 10/09/2014 10:00; Type: Grab

Analyte	Result	Reporting		Limits	Prepared	Analyzed	Analyst	Method	Notes
		Limit	Units						

Microbac Laboratories, Inc. - Baltimore

Metals, Total by EPA 6000/7000 Series Methods

Lead	22	4.1	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B
Antimony	ND	8.2	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B
Thallium	ND	8.2	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B
Vanadium	130	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B
Zinc	60	2.0	mg/kg dry		102014 1334	102214 1759	APS	EPA 6010B

TCLP Extraction by EPA 1311

TCLP Extraction	COMPLETED		N/A		101614 1904	102014 1430	TRB	EPA 1311
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TCLP Metals by 6000/7000 Series Methods

Silver	ND	0.20	mg/L	5.0	102014 1033	102114 1732	APS	EPA 6010B
Arsenic	ND	0.20	mg/L	5.0	102014 1033	102114 1732	APS	EPA 6010B
Barium	ND	0.50	mg/L	100	102014 1033	102114 1732	APS	EPA 6010B
Cadmium	ND	0.20	mg/L	1.0	102014 1033	102114 1732	APS	EPA 6010B
Chromium	ND	0.20	mg/L	5.0	102014 1033	102114 1732	APS	EPA 6010B
Mercury	ND	0.0020	mg/L	0.20	102014 1504	102114 1759	FAK	EPA 7470A
Lead	ND	0.20	mg/L	5.0	102014 1033	102114 1732	APS	EPA 6010B
Selenium	ND	0.20	mg/L	1.0	102014 1033	102114 1732	APS	EPA 6010B

Microbac Laboratories, Inc. - Chicagoland

Metals

Sulfur	3100	4.9	mg/Kg		110714 0942	110714 1632	AG	SW-846 6010B
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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown
Mirant-Ryceville, 13970 Ryceville Rd
Mechanicsville, MD 20659

Project: Morgantown-Fly Ash
Project Number: Morgantown-Fly Ash
Project Manager: Walter Johnson

Report: 14J0732
Reported: 11/10/2014 21:40

Project Requested Certification(s):

A2LA (Environmental)

Analyte Certification Exception Summary

Microbac Laboratories, Inc. - Baltimore

Matrix: Solid

EPA 9056

Chloride: No Certification

Sulfate as SO₄: No Certification

SM (20) 2540G

% Solids: No Certification

All analysis performed were analyzed under the required certification unless otherwise noted in the above summary.

Microbac Laboratories, Inc. - Baltimore

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Melanie C. Duszynski, Project Manager

Original Report

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown

Mirant-Ryceville, 13970 Ryceville Rd

Mechanicsville, MD 20659

Project: Morgantown-Fly Ash

Project Number: Morgantown-Fly Ash

Project Manager: Walter Johnson

Report: 14J0732

Reported: 11/10/2014 21:40

Certification List

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Code	Description	Certification Number	Expires
Microbac Laboratories, Inc. - Baltimore			
A2LA1	A2LA (Biology)	410.02	04/30/2015
A2LA2	A2LA (Environmental)	410.01	04/30/2015
CPSC	CPSC Testing of Childrens Products and Jewelry	1115	04/30/2015
Pb	Environmental Lead (ELLAP)	410.01	04/30/2015
MD	State of Maryland (Drinking Water)	109	06/30/2015
Microbac Laboratories, Inc. - Chicagoland			
A2LA_	A2LA ISO/IEC 17025 Biological Testing	3045.01	09/30/2016
A2LA	A2LA ISO/IEC 17025 Env. DoD Testing	3045.02	09/30/2016
ILDPH	Illinois DOPH Micro analysis of drinking water	1755266	12/31/2016
ILEPA	Illinois EPA wastewater and solid waste analysis	200064	04/01/2015
INDEM	Indiana DEM support lab wastewater and solid waste	A305-9-292	12/31/2013
INSDH	Indiana SDH chemical analysis of drinking water	C-45-03	08/14/2016
INDH	Indiana SDH Micro analysis of drinking water	M-45-8	12/31/2016
KSDOH	Kansas Dept Health & Env. NELAP	E-10397	01/31/2015
KYEPP	Kentucky EPPC analysis Underground Storage Tanks	75	01/31/2015
NYDOH	New York State Department of Health Wadsworth	49179	04/01/2015
NYDOH-1	New York State Department of Health Wadsworth	49386	04/01/2015
NCDEN	North Carolina DENR NPDES effluent, surface water	597	12/31/2014
PEDEP	Pennsylvania DEP Registration for Air analysis	68-04863	
PADEP	Pennsylvania Department of Environmental Protect	68-04863	07/31/2015
USDAS	USDA Permit To Receive Soil	P330-12-00174	06/20/2015
WADOE	Washington State Department of Ecology	C992	10/22/2015
WIDNR	Wisconsin DRN chemical analysis wastewater, solids	998036710	08/31/2015
Microbac Laboratories, Inc. - Richmond			
VA-R	Commonwealth of Virginia (NELAC) - Richmond	460022	06/14/2015

Microbac Laboratories, Inc. - Baltimore

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CERTIFICATE OF ANALYSIS

NRG Energy - Morgantown

Mirant-Ryceville, 13970 Ryceville Rd

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Qualifiers/Notes and Definitions**General Definitions:**

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Analysis Qualifiers/Notes:**Microbac Laboratories, Inc. - Baltimore**

Z10c	pH temperature at 24.0°C
Z10b	pH temperature at 23.4°C
Z10a	pH temperature at 23.2°C
Z10	Chloride sample duplicate RPD was out of laboratory acceptance limits; Duplicate result was 16mg/L Cl.



Microbac Laboratories, Inc.

Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

Cooler Receipt Log

Cooler ID: Default Cooler	Cooler Temp: 2.10°C	Work Order: 14J0732
Custody Seals Intact: Yes	COC/Containers Agree: Yes	
Containers Intact: Yes	Correct Preservation: Yes	
Received On Ice: Yes	Correct Number of Containers Received: Yes	
Radiation Scan Acceptable: Yes	Sufficient Sample Volume for Testing: Yes	
COC Present: Yes	Samples Received in Proper Condition: Yes	

Comments:



Microbac Laboratories Inc., Baltimore Division
 2101 Van Daman St, Baltimore, MD 21224
 Tel: 410-633-1800
 Fax: 410-633-6553
 www.microbac.com

Work Order Number: **1450732**

Chain of Custody Record

Page **1** of **1**
 Instructions for completing the Chain of Custody Record on back.

Client Name: **MRG-Morganpm**
 Address: **12620 Crain Highway**
 City, State, Zip: **Newburg, MD 20664**
 Contact: **John Williams**
 Telephone #: **301-843-4560**

Project: _____
 Location: _____
 PO #: _____
 Compliance Monitoring? Yes No
 (1) Agency Program

Turnaround Time: **Standard (7 Business Days)**
 RUSH* Needed By: _____
 * Please notify lab prior to drop off

QC and EDD Type (Required):
 Level I (NAC) FID
 Level II** Format
 Level III** Comments:
 Level IV**

Sampler Signature: **[Signature]** Sampler Phone #: **Same** Sampler (DWJ)Cent# _____
 Send Report via e-mail (address) Mail Telephone Fax (fax #)

Matrix Types: Air(A), Childrens Product(CP), Food(F), Paint(P), Soil/Sand (S), Oil(O), Wipe(W), Drinkin. Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (O)

Client Sample ID	Matrix**	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analysis	Comments
Bottom Ash	S	X			10-8-14	1530	1	Chloride Sulfate pH (as received) TCLP metals Total metals Boron Lithium Sulfur	
Gypsum	S	X			10-8-14	1500	1		
WWTP Filter Cake	S	X			10-8-14	1600	1		
Unit F ₁ Flyash	S	X			10-9-14	1000	1		
Unit F ₂ Flyash	S	X			10-9-14	1000	1		



14J0732

Possible Hazard Identification: Hazardous Non-Hazardous

Relinquished By (signature): **[Signature]** Date/Time: **10-14-14 1130**
 Relinquished By (signature): **[Signature]** Date/Time: **10/14/14 1613**
 Relinquished By (signature): **[Signature]** Date/Time: _____

Received By (signature): **[Signature]** Date/Time: **10/14/14 1613**
 Received By (signature): **[Signature]** Date/Time: _____

Printed Name/Affiliation: **[Name]**
 Printed Name/Affiliation: **[Name]**

Number of Containers: _____

Boiler Number: **21**
 Sample upon receipt ("C"): **(C)**
 Sample Received on Ice or Refrigerated from Client: Yes No
 Radiation Scan Acceptable: Yes No

** Surcharge May Apply to add'l QC Packages**