

ADDENDA LOG

Document: Permit Application
 Colon Mine Site Structural Fill
 Division of Waste Management

| Date | No. | Section | Reference | Modification | Action Needed |
|-----------|-----|-------------------|-------------|---|--|
| 12/8/2014 | 1 | Facility Plan | §2.1.7 | updated TCLP references in text; updated Appendix B | replace page 9 and Appendix B |
| | | Operations Plan | §2.1.2 | updated TCLP references in text | replace page 4 |
| | | Related Documents | cover sheet | added TCLP reports | replace cover sheet, insert TCLP reports |

| Permit No. | Scan Date | DIN |
|--------------|-------------------|--------------|
| P1287 | 12/10/2014 | 22463 |

RECEIVED
December 8, 2014
 Solid Waste Section
 Asheville Regional Office

2.1.7 Procedures for CCP Acceptance

The structural fill will only accept CCPs that it is permitted to receive. The appropriate toxicity characteristic leaching procedure (TCLP) analyses are included in the Related Documents section of this application. The process will be repeated if the source changes. Any load that contains materials or CCPs that the structural fill is not allowed to accept will not be placed in the structural fill.

2.1.8 Equipment Requirements

Equipment requirements may vary in accordance with the method or scope of structural fill operations at any given time. Additional or different types of equipment may be provided as necessary to enhance operational efficiency; however, in order to ensure adequate operation of the proposed facility, arrangements shall be made to ensure that equipment is available for the following activities.

- Excavation of onsite soil
- Preparing the cells for CCP reception
- Spreading and compacting the CCP
- Moisture conditioning the CCP or structural fill
- Excavating and transporting cover soil
- Spreading and compacting cover soil
- Site maintenance, dust control, and clean-up work

The equipment onsite is currently used to manage mining operations. When the proposed structural fill is ready to accept CCPs, the equipment will use the procedures and techniques for spreading, compacting, and covering CCPs outlined in the Operations Plan included in this Permit Application. In the event the amount of CCP placement increases significantly, the need for additional equipment will be evaluated. Additional equipment may be rented to accommodate short term needs or purchased to accommodate increased CCP placement rates.

2.2 Containment and Environmental Control Systems

The base liner and final cap system will be constructed in accordance with NCGS §130A-309.216.

2.2.1 Base Liner System

The purpose of the base liner system is to contain CCPs within the structural fill and prevent groundwater contamination by the CCPs. The base liner area for the structural fill is approximately 118 acres and is shown on Sheet No. 00C-03, Top of Liner. The post-settlement bottom elevation of the base liner system will meet the minimum requirement of four feet above the seasonal high groundwater table. North Carolina law allows two different types of baseliner systems. The following describes the components of the regulatory base liner system options from top down and as shown on the drawings.

2.2.1.1 COMPOSITE BASE LINER SYSTEM OPTION 1

- 60 mil HDPE geosynthetic liner
- 24 inches of compacted soil liner with a permeability of 1×10^{-7} cm/sec



Coal Combustion Product Generator and Location Information

Coal Combustion Product Generator Information

Company Name: Duke Energy

Company Address: 550 South Tryon Street

Charlotte, NC 28202

Contact Person: TBD

Contact Person Email: _____

Contact Person Telephone: _____

Coal Combustion Product Generation Location

Generation Location Address: Duke Energy – Riverbend Steam Station

175 Steam Plant Road

Mt. Holly, NC 28120

Generation Location Coordinates:

Latitude: 35.36022

Longitude: -80.97432

Generation Location Address: Duke Energy – Sutton Plant

801 Sutton Plant Road

Wilmington, NC 28401

Generation Location Coordinates:

Latitude: 34.28324

Longitude: -77.98595

such, the Colon Mine Site can accept CCPs defined as fly ash, bottom ash, boiler slag, or flue gas desulfurization materials in NCGS §130A-309.216 (4).

In accordance with NCGS §130A-309.215 (b) (1) d, a Toxicity Characteristic Leaching Procedure (TCLP) analysis has been performed on a representative sample from Duke Energy's Sutton Plant and Riverbend Steam Station CCP sources to be used in the structural fill project. Each was analyzed for, at a minimum, the following constituents: arsenic, barium, cadmium, lead, chromium, mercury, selenium, and silver. The TCLP results are included in the Related Documents section of this application.

Asbestos containing material will not be placed in the structural fill site. In addition, the removal of CCP structural fill material from the site is prohibited without owner approval. Structural fill will be hauled and placed by dedicated and consistent operators.

2.1.3 Fill Sequencing

The Colon Mine Site will be developed in sequence from Cell 1 through Cell 5. CCP product will be placed in three to five foot operational lifts, high to low. A conceptual schematic of fill sequencing from high to low is included in the permit drawings; however, actual fill sequencing and lift heights may be modified at the Owner's discretion. More than one cell may be operational at a time. The cells may also be subdivided into subcells.

2.1.4 Fill Placement

Structural fill placed at the Colon Mine Site will be transported to the facility via railcar or highway-rated vehicles. Upon reaching the site, off-road equipment may be utilized, within the facility boundary, to transport material to the active working area. After initial placement, additional operational equipment generally consisting of vibratory smooth drum rollers, sheepsfoot compactors, bulldozers, water trucks, spray trailers, track hoes, and service trucks may be utilized in fill placement.

Fill progression will be maintained to provide controlled drainage of contact water to the leachate collection system and stormwater runoff to the stormwater benches and perimeter ditches. No fill shall be placed in standing water.

2.1.5 Compaction Requirements and Testing

After the bottom liner is placed and approved, CCP placement may begin. The initial CCP lift placed should be two to three feet thick to protect the liner system. The initial lift shall be placed in a manner that minimizes development of folds in the geosynthetics. The surface should be lightly compacted to help avoid potential damage to the liner system.

Subsequent lifts of CCP should be placed in 8-inch thick loose lifts and compacted to at least 95 percent of its Standard Proctor (ASTM D698) maximum dry density. It may be necessary to adjust the moisture content of the CCP fill to achieve the specified compaction.

2.1.5.1 IN-PLACE DENSITY AND MOISTURE CONTENT TESTING

In-place density and moisture content testing shall be performed at a minimum frequency of one test per 5,000 cubic yards placed. CCP shall be compacted to a minimum 95 percent of its Standard Proctor (ASTM D698) maximum dry density. Compacted moisture content shall be

Related Documents

Colon Mine Site Structural Fill

Charah, Inc.

Sanford, NC

November 2014

Riverbend TCLP Report, Sept 2014
Wetlands Determination, August 2014
SWPPP, April 2014
Application for Mining Permit, March 2014
Colon Mine Drawings, February 2014
NPDES Permit NCG020854, November 2013
Sutton TCLP Report, June 2012
NCDENR Mine Permit 53-05, April 2005



Analytical Laboratory

13339 Hagers Ferry Road
Huntersville, NC 28078-7929
McGuire Nuclear Complex - MG03A2
Phone: 980-875-5245 Fax: 980-875-4349

Order Summary Report

Order Number: J14090369

Project Name:

Customer Name(s): Robert Wylie, Sean DeNeale, Andy Tinsley

Customer Address: 175 Steam Plant Rd
Mail Code: Riverbend Steam Station
Mt Holly, NC 28120

Lab Contact: Jason C Perkins Phone: 980-875-5348

Report Authorized By:
(Signature)



Jason C Perkins

Date: 9/30/2014

Program Comments:

Please contact the Program Manager (Jason C Perkins) with any questions regarding this report.

Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)

Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

Sample ID's & Descriptions:

| Sample ID | Plant/Station | Collection Date and Time | Collected By | Sample Description |
|------------------|----------------------|---------------------------------|---------------------|---------------------------|
| 2014027417 | RIVERBEND | 05-Aug-14 | ILLEGIBLE | B-101 (17-27, 27-37) |
| 2014027418 | RIVERBEND | 06-Aug-14 | ILLEGIBLE | B-101 (43.5, 47-57) |
| 2014027419 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-102 (3.5-7) |
| 2014027420 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-102 (14-17, 17-27) |
| 2014027421 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-102 (39) |
| 2014027422 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-116 (3.5-7) |
| 2014027423 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-116 (7-17) |
| 2014027424 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-117 (6-7, 7-17) |
| 2014027425 | RIVERBEND | 07-Aug-14 | ILLEGIBLE | B-117 (24.6) |
| 2014027426 | RIVERBEND | 08-Aug-14 | ILLEGIBLE | B-119 (7-17) |
| 2014027427 | RIVERBEND | 08-Aug-14 | ILLEGIBLE | B-119 (17-27) |
| 11 Total Samples | | | | |

Technical Validation Review

Checklist:

- COC and .pdf report are in agreement with sample totals and analyses (compliance programs and procedures). Yes No
- All Results are less than the laboratory reporting limits. Yes No
- All laboratory QA/QC requirements are acceptable. Yes No

Report Sections Included:

- Job Summary Report
- Sample Identification
- Technical Validation of Data Package
- Analytical Laboratory Certificate of Analysis
- Analytical Laboratory QC Report
- Sub-contracted Laboratory Results
- Customer Specific Data Sheets, Reports, & Documentation
- Customer Database Entries
- Chain of Custody
- Electronic Data Deliverable (EDD) Sent Separately

Reviewed By: DBA Account

Date: 9/30/2014

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-61841-1

Client Project/Site: Riverbend Dry Stack Ash J14090369

For:

Duke Energy Corporation
13339 Hagers Ferry Road
Huntersville, North Carolina 28078

Attn: Lab Customer



Authorized for release by:
9/30/2014 11:04:23 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|----------------------|--------|----------------|----------------|
| 490-61841-1 | B-101 (17-27, 27-37) | Solid | 08/05/14 01:01 | 09/19/14 08:30 |
| 490-61841-2 | B-101 (43.5, 47-57) | Solid | 08/06/14 01:01 | 09/19/14 08:30 |
| 490-61841-3 | B-102 (3.5-7) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-4 | B-102 (14-17, 17-27) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-5 | B-102 (3a) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-6 | B-116 (3.5-7) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-7 | B-116 (7-17) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-8 | B-117 (6-7, 7-17) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-9 | B-117 (24.6) | Solid | 08/07/14 01:01 | 09/19/14 08:30 |
| 490-61841-10 | B-119 (7-17) | Solid | 08/08/14 01:01 | 09/19/14 08:30 |
| 490-61841-11 | B-119 (17-27) | Solid | 08/08/14 01:01 | 09/19/14 08:30 |



Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Job ID: 490-61841-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: Duke Energy Corporation

Project: Riverbend Dry Stack Ash J14090369

Report Number: 490-61841-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/19/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 21.5 C.

Except:

The following sample(s) was received outside of holding time for Mercury: B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (14-17, 17-27) (490-61841-4), B-102 (3.5-7) (490-61841-3), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (24.6) (490-61841-9), B-117 (6-7, 7-17) (490-61841-8), B-119 (17-27) (490-61841-11), B-119 (7-17) (490-61841-10).

The following sample(s) was received at the laboratory outside the required temperature criteria for Mercury and Anions: B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (14-17, 17-27) (490-61841-4), B-102 (3.5-7) (490-61841-3), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (24.6) (490-61841-9), B-117 (6-7, 7-17) (490-61841-8), B-119 (17-27) (490-61841-11), B-119 (7-17) (490-61841-10). The client was contacted regarding this issue, and the laboratory was instructed to <<CHOOSE ONE>> proceed with/cancel analysis.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (3.5-7) (490-61841-3), B-102 (14-17, 17-27)



Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Job ID: 490-61841-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

(490-61841-4), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (6-7, 7-17) (490-61841-8), B-117 (24.6) (490-61841-9), B-119 (7-17) (490-61841-10) and B-119 (17-27) (490-61841-11) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 09/23/2014 and analyzed on 09/25/2014.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP METALS (ICP)

Samples B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (3.5-7) (490-61841-3), B-102 (14-17, 17-27) (490-61841-4), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (6-7, 7-17) (490-61841-8), B-117 (24.6) (490-61841-9), B-119 (7-17) (490-61841-10) and B-119 (17-27) (490-61841-11) were analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Method 1311/6010C. The samples were leached on 09/23/2014 and 09/24/2014, prepared on 09/24/2014 and 09/25/2014 and analyzed on 09/24/2014, 09/25/2014 and 09/26/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP MERCURY

Samples B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (3.5-7) (490-61841-3), B-102 (14-17, 17-27) (490-61841-4), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (6-7, 7-17) (490-61841-8), B-117 (24.6) (490-61841-9) and B-119 (7-17) (490-61841-10) were analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 09/23/2014, prepared on 09/24/2014 and analyzed on 09/25/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS

Samples B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (3.5-7) (490-61841-3), B-102 (14-17, 17-27) (490-61841-4), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (6-7, 7-17) (490-61841-8), B-117 (24.6) (490-61841-9), B-119 (7-17) (490-61841-10) and B-119 (17-27) (490-61841-11) were analyzed for anions in accordance with EPA SW-846 Method 9056A. The samples were leached on 09/23/2014 and analyzed on 09/25/2014 and 09/26/2014.

Sample B-117 (24.6) (490-61841-9)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (3.5-7) (490-61841-3), B-102 (14-17, 17-27) (490-61841-4), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (6-7, 7-17) (490-61841-8), B-117 (24.6) (490-61841-9), B-119 (7-17) (490-61841-10) and B-119 (17-27) (490-61841-11) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 09/22/2014.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ORGANIC PREP

Method(s) 1311: Insufficient sample was provided to perform the leaching procedure with the required 100g for the following sample(s): B-101 (17-27, 27-37) (490-61841-1), B-101 (43.5, 47-57) (490-61841-2), B-102 (14-17, 17-27) (490-61841-4), B-102 (3.5-7) (490-61841-3), B-102 (3a) (490-61841-5), B-116 (3.5-7) (490-61841-6), B-116 (7-17) (490-61841-7), B-117 (24.6) (490-61841-9), B-117 (6-7, 7-17) (490-61841-8), B-119 (7-17) (490-61841-10). The volume of leaching fluid was adjusted proportionally to maintain a 20:1 ratio of leaching fluid to weight of sample. Reporting limits (RLs) are not affected.

Method(s) 1311: Insufficient sample was provided to perform the leaching procedure with the required 100g for the following sample(s): B-119 (17-27) (490-61841-11). The volume of leaching fluid was adjusted proportionally to maintain a 20:1 ratio of leaching fluid to weight of sample. Reporting limits (RLs) are not affected.

Case Narrative

Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Job ID: 490-61841-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

SUBCONTRACT WORK - ASBESTOS

Method Asbestos: This method was subcontracted to EMLab P&K Fort Lauderdale. The subcontract laboratory certification is different from that of the facility issuing the final report.

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Definitions/Glossary

Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Qualifiers

Metals

| Qualifier | Qualifier Description |
|-----------|--|
| H | Sample was prepped or analyzed beyond the specified holding time |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| □ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-101 (17-27, 27-37)

Lab Sample ID: 490-61841-1

Date Collected: 08/05/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 78.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1221 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1232 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1242 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1248 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1254 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| PCB-1260 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 12:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 65 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 12:50 | 1 |
| Tetrachloro-m-xylene | 51 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 12:50 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 296 | | 12.9 | mg/Kg | ☼ | | 09/25/14 01:11 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:05 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:05 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:05 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:05 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:03 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:05 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:03 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:28 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 22 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 78 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-101 (43.5, 47-57)

Lab Sample ID: 490-61841-2

Date Collected: 08/06/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 75.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1221 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1232 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1242 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1248 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1254 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| PCB-1260 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 13:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 77 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 13:59 | 1 |
| Tetrachloro-m-xylene | 57 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 13:59 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 539 | | 13.1 | mg/Kg | ☼ | | 09/25/14 01:31 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:28 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:28 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:28 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:28 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:25 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:28 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:25 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:29 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 25 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 75 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-102 (3.5-7)

Lab Sample ID: 490-61841-3

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 78.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1221 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1232 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1242 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1248 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1254 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| PCB-1260 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:22 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 70 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 14:22 | 1 |
| Tetrachloro-m-xylene | 62 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 14:22 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 65.7 | | 12.6 | mg/Kg | ☼ | | 09/25/14 01:51 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:31 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:31 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:31 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:31 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:28 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:31 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:28 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 22 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 78 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-102 (14-17, 17-27)

Lab Sample ID: 490-61841-4

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 76.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1221 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1232 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1242 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1248 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1254 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| PCB-1260 | ND | | 0.0326 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 14:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 78 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 14:45 | 1 |
| Tetrachloro-m-xylene | 60 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 14:45 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 315 | | 12.9 | mg/Kg | ☼ | | 09/25/14 02:51 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:35 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:35 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:35 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:35 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:32 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:35 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:32 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:36 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 23 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 77 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-102 (3a)

Lab Sample ID: 490-61841-5

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 76.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1221 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1232 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1242 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1248 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1254 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| PCB-1260 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 15:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 84 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 15:55 | 1 |
| Tetrachloro-m-xylene | 64 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 15:55 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 255 | | 13.1 | mg/Kg | ☼ | | 09/25/14 03:11 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:38 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:38 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:38 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:38 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:35 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:38 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:35 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 24 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 76 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-116 (3.5-7)

Lab Sample ID: 490-61841-6

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 77.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1221 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1232 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1242 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1248 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1254 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| PCB-1260 | ND | | 0.0332 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 82 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 16:18 | 1 |
| Tetrachloro-m-xylene | 68 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 16:18 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 105 | | 13.1 | mg/Kg | ☼ | | 09/25/14 03:31 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:42 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:42 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:42 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:42 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:39 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:42 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:39 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:38 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 23 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 77 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-116 (7-17)

Lab Sample ID: 490-61841-7

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 74.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1221 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1232 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1242 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1248 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1254 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| PCB-1260 | ND | | 0.0330 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 16:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 85 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 16:41 | 1 |
| Tetrachloro-m-xylene | 71 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 16:41 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 198 | | 13.3 | mg/Kg | ☼ | | 09/25/14 03:51 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:45 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:45 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:45 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:45 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:42 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:45 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:42 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:40 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 25 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 75 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-117 (6-7, 7-17)

Lab Sample ID: 490-61841-8

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 74.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1221 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1232 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1242 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1248 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1254 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| PCB-1260 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:04 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 82 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 17:04 | 1 |
| Tetrachloro-m-xylene | 68 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 17:04 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 89.6 | | 13.3 | mg/Kg | ☼ | | 09/25/14 04:11 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:49 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:49 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:49 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:49 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:46 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:49 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:46 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:41 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 26 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 74 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-117 (24.6)

Lab Sample ID: 490-61841-9

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 86.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1221 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1232 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1242 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1248 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1254 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| PCB-1260 | ND | | 0.0333 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:27 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 80 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 17:27 | 1 |
| Tetrachloro-m-xylene | 65 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 17:27 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 15700 | | 1170 | mg/Kg | ☼ | | 09/26/14 17:29 | 100 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:52 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:52 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:52 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:52 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 13:49 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:52 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 13:49 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:43 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 14 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 86 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-119 (7-17)

Lab Sample ID: 490-61841-10

Date Collected: 08/08/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 75.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1221 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1232 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1242 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1248 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1254 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| PCB-1260 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 17:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 90 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 17:50 | 1 |
| Tetrachloro-m-xylene | 77 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 17:50 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 570 | | 13.1 | mg/Kg | ☼ | | 09/25/14 04:51 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:56 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 22:56 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 22:56 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:56 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 14:04 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 22:56 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 14:04 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 10:44 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 25 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 75 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

Client Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-119 (17-27)

Lab Sample ID: 490-61841-11

Date Collected: 08/08/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 71.0

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1221 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1232 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1242 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1248 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1254 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| PCB-1260 | ND | | 0.0331 | mg/Kg | ☼ | 09/23/14 16:56 | 09/25/14 18:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 95 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 18:13 | 1 |
| Tetrachloro-m-xylene | 78 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 18:13 | 1 |

Method: 9056A - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|------|-------|---|----------|----------------|---------|
| Sulfate | 415 | | 14.1 | mg/Kg | ☼ | | 09/25/14 05:11 | 1 |

Method: 6010C - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 21:20 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/25/14 10:31 | 09/26/14 13:54 | 1 |

Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------|-----------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | H | 0.00200 | mg/L | | 09/25/14 11:11 | 09/25/14 11:23 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------|--------|-----------|------|------|---|----------|----------------|---------|
| Percent Moisture | 29 | | 0.10 | % | | | 09/22/14 18:28 | 1 |
| Percent Solids | 71 | | 0.10 | % | | | 09/22/14 18:28 | 1 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-192666/1-A
Matrix: Solid
Analysis Batch: 193067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192666

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|--------|-------|---|----------------|----------------|---------|
| PCB-1016 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1221 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1232 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1242 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1248 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1254 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| PCB-1260 | ND | | 0.0333 | mg/Kg | | 09/23/14 16:56 | 09/25/14 10:54 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------|--------------|--------------|----------|----------------|----------------|---------|
| DCB Decachlorobiphenyl (Surr) | 87 | | 20 - 150 | 09/23/14 16:56 | 09/25/14 10:54 | 1 |
| Tetrachloro-m-xylene | 94 | | 19 - 147 | 09/23/14 16:56 | 09/25/14 10:54 | 1 |

Lab Sample ID: LCS 490-192666/2-A
Matrix: Solid
Analysis Batch: 193067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192666

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| PCB-1016 | 0.167 | 0.1524 | | mg/Kg | | 91 | 65 - 125 |
| PCB-1260 | 0.167 | 0.1535 | | mg/Kg | | 92 | 52 - 150 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-------------------------------|---------------|---------------|----------|
| DCB Decachlorobiphenyl (Surr) | 86 | | 20 - 150 |
| Tetrachloro-m-xylene | 66 | | 19 - 147 |

Lab Sample ID: 490-61841-1 MS
Matrix: Solid
Analysis Batch: 193067

Client Sample ID: B-101 (17-27, 27-37)
Prep Type: Total/NA
Prep Batch: 192666

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| PCB-1016 | ND | | 0.210 | 0.1755 | | mg/Kg | ☼ | 83 | 42 - 140 |
| PCB-1260 | ND | | 0.210 | 0.1746 | | mg/Kg | ☼ | 83 | 37 - 159 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-------------------------------|--------------|--------------|----------|
| DCB Decachlorobiphenyl (Surr) | 73 | | 20 - 150 |
| Tetrachloro-m-xylene | 60 | | 19 - 147 |

Lab Sample ID: 490-61841-1 MSD
Matrix: Solid
Analysis Batch: 193067

Client Sample ID: B-101 (17-27, 27-37)
Prep Type: Total/NA
Prep Batch: 192666

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| PCB-1016 | ND | | 0.211 | 0.1784 | | mg/Kg | ☼ | 84 | 42 - 140 | 2 | 50 |
| PCB-1260 | ND | | 0.211 | 0.1694 | | mg/Kg | ☼ | 80 | 37 - 159 | 3 | 50 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|-------------------------------|---------------|---------------|----------|
| DCB Decachlorobiphenyl (Surr) | 73 | | 20 - 150 |
| Tetrachloro-m-xylene | 49 | | 19 - 147 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-192629/1-A
Matrix: Solid
Analysis Batch: 192913

Client Sample ID: Method Blank
Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Sulfate | ND | | 10.1 | mg/Kg | | | 09/24/14 21:10 | 1 |

Lab Sample ID: LCS 490-192629/2-A
Matrix: Solid
Analysis Batch: 192913

Client Sample ID: Lab Control Sample
Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Sulfate | 493 | 576.1 | | mg/Kg | | 117 | 80 - 120 |

Lab Sample ID: LCSD 490-192629/3-A
Matrix: Solid
Analysis Batch: 192913

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Sulfate | 499 | 568.4 | | mg/Kg | | 114 | 80 - 120 | 1 | 20 |

Lab Sample ID: 490-61390-A-1-B MS
Matrix: Solid
Analysis Batch: 192913

Client Sample ID: Matrix Spike
Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Sulfate | 13.3 | | 624 | 720.1 | | mg/Kg | ☼ | 113 | 80 - 120 |

Lab Sample ID: 490-61390-A-1-C MSD
Matrix: Solid
Analysis Batch: 192913

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Sulfate | 13.3 | | 606 | 705.0 | | mg/Kg | ☼ | 114 | 80 - 120 | 2 | 20 |

Lab Sample ID: MB 490-192629/1-A
Matrix: Solid
Analysis Batch: 193424

Client Sample ID: Method Blank
Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Sulfate | ND | | 10.1 | mg/Kg | | | 09/26/14 16:28 | 1 |

Lab Sample ID: LCS 490-192629/2-A
Matrix: Solid
Analysis Batch: 193424

Client Sample ID: Lab Control Sample
Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Sulfate | 493 | 536.8 | | mg/Kg | | 109 | 80 - 120 |

Lab Sample ID: LCSD 490-192629/3-A
Matrix: Solid
Analysis Batch: 193424

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Sulfate | 499 | 527.2 | | mg/Kg | | 106 | 80 - 120 | 2 | 20 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-192760/1-A
Matrix: Solid
Analysis Batch: 193047

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:55 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 21:55 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 21:55 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:55 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:55 | 1 |

Lab Sample ID: MB 490-192760/1-A
Matrix: Solid
Analysis Batch: 193262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 12:53 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 12:53 | 1 |

Lab Sample ID: MB 490-192760/1-A
Matrix: Solid
Analysis Batch: 193309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 16:29 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 16:29 | 1 |

Lab Sample ID: LCS 490-192760/3-A
Matrix: Solid
Analysis Batch: 193047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. | |
|----------|-------------|------------|---------------|------|---|------|----------|--|
| | | | | | | | Limits | |
| Arsenic | 2.00 | 2.011 | | mg/L | | 101 | 80 - 120 | |
| Barium | 20.0 | 20.11 | | mg/L | | 101 | 80 - 120 | |
| Cadmium | 2.00 | 1.969 | | mg/L | | 98 | 80 - 120 | |
| Chromium | 10.0 | 9.734 | | mg/L | | 97 | 80 - 120 | |
| Lead | 10.0 | 10.66 | | mg/L | | 107 | 80 - 120 | |

Lab Sample ID: LCS 490-192760/3-A
Matrix: Solid
Analysis Batch: 193262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. | |
|----------|-------------|------------|---------------|------|---|------|----------|--|
| | | | | | | | Limits | |
| Silver | 2.00 | 1.921 | | mg/L | | 96 | 80 - 120 | |
| Selenium | 2.00 | 2.049 | | mg/L | | 102 | 80 - 120 | |

Lab Sample ID: LCS 490-192760/3-A
Matrix: Solid
Analysis Batch: 193309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192760

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. | |
|----------|-------------|------------|---------------|------|---|------|----------|--|
| | | | | | | | Limits | |
| Silver | 2.00 | 1.988 | | mg/L | | 99 | 80 - 120 | |
| Selenium | 2.00 | 2.239 | | mg/L | | 112 | 80 - 120 | |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 490-193131/1-A

Matrix: Solid

Analysis Batch: 193350

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 193131

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/25/14 10:30 | 09/25/14 20:16 | 1 |

Lab Sample ID: MB 490-193131/1-A

Matrix: Solid

Analysis Batch: 193538

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 193131

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Selenium | ND | | 0.100 | mg/L | | 09/25/14 10:30 | 09/26/14 13:00 | 1 |

Lab Sample ID: LCS 490-193131/4-A

Matrix: Solid

Analysis Batch: 193350

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 193131

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Arsenic | 2.00 | 2.063 | | mg/L | | 103 | 80 - 120 |
| Barium | 20.0 | 20.30 | | mg/L | | 102 | 80 - 120 |
| Cadmium | 2.00 | 2.047 | | mg/L | | 102 | 80 - 120 |
| Chromium | 10.0 | 10.33 | | mg/L | | 103 | 80 - 120 |
| Silver | 2.00 | 1.892 | | mg/L | | 95 | 80 - 120 |
| Lead | 10.0 | 11.02 | | mg/L | | 110 | 80 - 120 |

Lab Sample ID: LCS 490-193131/4-A

Matrix: Solid

Analysis Batch: 193538

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 193131

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|------|---|------|--------------|
| Selenium | 2.00 | 2.058 | | mg/L | | 103 | 80 - 120 |

Lab Sample ID: LB 490-192582/1-C

Matrix: Solid

Analysis Batch: 193047

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 192760

| Analyte | LB Result | LB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:59 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/24/14 09:51 | 09/24/14 21:59 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/24/14 21:59 | 1 |
| Chromium | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:59 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/24/14 21:59 | 1 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LB 490-192582/1-C

Matrix: Solid

Analysis Batch: 193262

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 192760

| Analyte | LB Result | LB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Silver | ND | | 0.500 | mg/L | | 09/24/14 09:51 | 09/25/14 12:56 | 1 |
| Selenium | ND | | 0.100 | mg/L | | 09/24/14 09:51 | 09/25/14 12:56 | 1 |

Lab Sample ID: 490-61841-1 MS

Matrix: Solid

Analysis Batch: 193047

Client Sample ID: B-101 (17-27, 27-37)

Prep Type: TCLP

Prep Batch: 192760

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Arsenic | ND | | 2.00 | 2.087 | | mg/L | | 99 | 75 - 125 |
| Barium | ND | | 20.0 | 20.58 | | mg/L | | 93 | 75 - 125 |
| Cadmium | ND | | 2.00 | 1.929 | | mg/L | | 96 | 75 - 125 |
| Chromium | ND | | 10.0 | 9.160 | | mg/L | | 92 | 75 - 125 |
| Lead | ND | | 10.0 | 10.27 | | mg/L | | 103 | 75 - 125 |

Lab Sample ID: 490-61841-1 MS

Matrix: Solid

Analysis Batch: 193262

Client Sample ID: B-101 (17-27, 27-37)

Prep Type: TCLP

Prep Batch: 192760

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Silver | ND | | 2.00 | 1.885 | | mg/L | | 94 | 75 - 125 |
| Selenium | ND | | 2.00 | 2.087 | | mg/L | | 102 | 75 - 125 |

Lab Sample ID: 490-61841-1 MSD

Matrix: Solid

Analysis Batch: 193047

Client Sample ID: B-101 (17-27, 27-37)

Prep Type: TCLP

Prep Batch: 192760

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Arsenic | ND | | 2.00 | 2.293 | | mg/L | | 110 | 75 - 125 | 9 | 20 |
| Barium | ND | | 20.0 | 22.66 | | mg/L | | 103 | 75 - 125 | 10 | 20 |
| Cadmium | ND | | 2.00 | 2.107 | | mg/L | | 105 | 75 - 125 | 9 | 20 |
| Chromium | ND | | 10.0 | 10.22 | | mg/L | | 102 | 75 - 125 | 11 | 20 |
| Lead | ND | | 10.0 | 11.28 | | mg/L | | 113 | 75 - 125 | 9 | 20 |

Lab Sample ID: 490-61841-1 MSD

Matrix: Solid

Analysis Batch: 193262

Client Sample ID: B-101 (17-27, 27-37)

Prep Type: TCLP

Prep Batch: 192760

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Silver | ND | | 2.00 | 2.013 | | mg/L | | 101 | 75 - 125 | 7 | 20 |
| Selenium | ND | | 2.00 | 2.253 | | mg/L | | 110 | 75 - 125 | 8 | 20 |

Lab Sample ID: LB 490-192854/1-B

Matrix: Solid

Analysis Batch: 193350

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 193131

| Analyte | LB Result | LB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|-------|------|---|----------------|----------------|---------|
| Arsenic | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |
| Barium | ND | | 10.0 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |
| Cadmium | ND | | 0.100 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LB 490-192854/1-B
Matrix: Solid
Analysis Batch: 193350

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 193131

| Analyte | LB LB | | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | |
| Chromium | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |
| Silver | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |
| Lead | ND | | 0.500 | mg/L | | 09/25/14 10:31 | 09/25/14 20:23 | 1 |

Lab Sample ID: LB 490-192854/1-B
Matrix: Solid
Analysis Batch: 193538

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 193131

| Analyte | LB LB | | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | |
| Selenium | ND | | 0.100 | mg/L | | 09/25/14 10:31 | 09/26/14 13:07 | 1 |

Lab Sample ID: 490-62081-A-1-C MS
Matrix: Solid
Analysis Batch: 193350

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 193131

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS MS | | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|--------|-----------|------|---|------|-------------|
| | | | | Result | Qualifier | | | | |
| Arsenic | ND | | 2.00 | 2.407 | | mg/L | | 120 | 75 - 125 |
| Barium | ND | | 20.0 | 21.60 | | mg/L | | 107 | 75 - 125 |
| Cadmium | 0.249 | | 2.00 | 2.564 | | mg/L | | 116 | 75 - 125 |
| Chromium | ND | | 10.0 | 10.79 | | mg/L | | 108 | 75 - 125 |
| Silver | ND | | 2.00 | 2.054 | | mg/L | | 103 | 75 - 125 |
| Lead | ND | | 10.0 | 12.30 | | mg/L | | 120 | 75 - 125 |

Lab Sample ID: 490-62081-A-1-C MS
Matrix: Solid
Analysis Batch: 193538

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 193131

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS MS | | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|--------|-----------|------|---|------|-------------|
| | | | | Result | Qualifier | | | | |
| Selenium | ND | | 2.00 | 2.344 | | mg/L | | 117 | 75 - 125 |

Lab Sample ID: 490-62081-A-1-D MSD
Matrix: Solid
Analysis Batch: 193350

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP
Prep Batch: 193131

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD MSD | | Unit | D | %Rec | %Rec Limits | RPD | |
|----------|---------------|------------------|-------------|---------|-----------|------|---|------|-------------|-----|-------|
| | | | | Result | Qualifier | | | | | RPD | Limit |
| Arsenic | ND | | 2.00 | 2.260 | | mg/L | | 113 | 75 - 125 | 6 | 20 |
| Barium | ND | | 20.0 | 20.12 | | mg/L | | 99 | 75 - 125 | 7 | 20 |
| Cadmium | 0.249 | | 2.00 | 2.375 | | mg/L | | 106 | 75 - 125 | 8 | 20 |
| Chromium | ND | | 10.0 | 10.04 | | mg/L | | 100 | 75 - 125 | 7 | 20 |
| Silver | ND | | 2.00 | 1.919 | | mg/L | | 96 | 75 - 125 | 7 | 20 |
| Lead | ND | | 10.0 | 11.38 | | mg/L | | 111 | 75 - 125 | 8 | 20 |

Lab Sample ID: 490-62081-A-1-D MSD
Matrix: Solid
Analysis Batch: 193538

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP
Prep Batch: 193131

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD MSD | | Unit | D | %Rec | %Rec Limits | RPD | |
|----------|---------------|------------------|-------------|---------|-----------|------|---|------|-------------|-----|-------|
| | | | | Result | Qualifier | | | | | RPD | Limit |
| Selenium | ND | | 2.00 | 2.210 | | mg/L | | 111 | 75 - 125 | 6 | 20 |

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-192746/1-A
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192746

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 09:44 | 1 |

Lab Sample ID: LCS 490-192746/4-A
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192746

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.0200 | 0.02046 | | mg/L | | 102 | 80 - 120 |

Lab Sample ID: MB 490-192747/1-A
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 192747

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | | 0.00200 | mg/L | | 09/24/14 09:20 | 09/25/14 09:31 | 1 |

Lab Sample ID: LCS 490-192747/3-A
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 192747

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 0.0200 | 0.01971 | | mg/L | | 99 | 80 - 120 |

Lab Sample ID: LB 490-192343/1-C
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 192746

| Analyte | LB Result | LB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | | 0.00200 | mg/L | | 09/24/14 09:17 | 09/25/14 09:46 | 1 |

Lab Sample ID: 490-61889-B-1-H MS
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 192746

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Mercury | ND | | 0.0200 | 0.02073 | | mg/L | | 104 | 75 - 125 |

Lab Sample ID: 490-61889-B-1-I MSD
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP
Prep Batch: 192746

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Mercury | ND | | 0.0200 | 0.01998 | | mg/L | | 100 | 75 - 125 | 4 | 20 |

Lab Sample ID: LB 490-192582/1-B
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 192747

| Analyte | LB Result | LB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|------|---|----------------|----------------|---------|
| Mercury | ND | | 0.00200 | mg/L | | 09/24/14 09:20 | 09/25/14 09:32 | 1 |

TestAmerica Nashville

QC Sample Results

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Lab Sample ID: 490-62014-B-2-E MS
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 192747

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Mercury | ND | | 0.0200 | 0.01950 | | mg/L | | 98 | 75 - 125 |

Lab Sample ID: 490-62014-B-2-F MSD
Matrix: Solid
Analysis Batch: 193183

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP
Prep Batch: 192747

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Mercury | ND | | 0.0200 | 0.01910 | | mg/L | | 95 | 75 - 125 | 2 | 20 |

Method: Moisture - Percent Moisture

Lab Sample ID: 490-61841-1 DU
Matrix: Solid
Analysis Batch: 192382

Client Sample ID: B-101 (17-27, 27-37)
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Percent Moisture | 22 | | 22 | | % | | 0.8 | 20 |
| Percent Solids | 78 | | 78 | | % | | 0.2 | 20 |

QC Association Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

GC Semi VOA

Prep Batch: 192666

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | Total/NA | Solid | 3550C | |
| 490-61841-1 MS | B-101 (17-27, 27-37) | Total/NA | Solid | 3550C | |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | Total/NA | Solid | 3550C | |
| 490-61841-2 | B-101 (43.5, 47-57) | Total/NA | Solid | 3550C | |
| 490-61841-3 | B-102 (3.5-7) | Total/NA | Solid | 3550C | |
| 490-61841-4 | B-102 (14-17, 17-27) | Total/NA | Solid | 3550C | |
| 490-61841-5 | B-102 (3a) | Total/NA | Solid | 3550C | |
| 490-61841-6 | B-116 (3.5-7) | Total/NA | Solid | 3550C | |
| 490-61841-7 | B-116 (7-17) | Total/NA | Solid | 3550C | |
| 490-61841-8 | B-117 (6-7, 7-17) | Total/NA | Solid | 3550C | |
| 490-61841-9 | B-117 (24.6) | Total/NA | Solid | 3550C | |
| 490-61841-10 | B-119 (7-17) | Total/NA | Solid | 3550C | |
| 490-61841-11 | B-119 (17-27) | Total/NA | Solid | 3550C | |
| LCS 490-192666/2-A | Lab Control Sample | Total/NA | Solid | 3550C | |
| MB 490-192666/1-A | Method Blank | Total/NA | Solid | 3550C | |

Analysis Batch: 193067

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-1 MS | B-101 (17-27, 27-37) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-2 | B-101 (43.5, 47-57) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-3 | B-102 (3.5-7) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-4 | B-102 (14-17, 17-27) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-5 | B-102 (3a) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-6 | B-116 (3.5-7) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-7 | B-116 (7-17) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-8 | B-117 (6-7, 7-17) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-9 | B-117 (24.6) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-10 | B-119 (7-17) | Total/NA | Solid | 8082A | 192666 |
| 490-61841-11 | B-119 (17-27) | Total/NA | Solid | 8082A | 192666 |
| LCS 490-192666/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 192666 |
| MB 490-192666/1-A | Method Blank | Total/NA | Solid | 8082A | 192666 |

HPLC/IC

Leach Batch: 192629

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 490-61390-A-1-B MS | Matrix Spike | Soluble | Solid | DI Leach | |
| 490-61390-A-1-C MSD | Matrix Spike Duplicate | Soluble | Solid | DI Leach | |
| 490-61841-1 | B-101 (17-27, 27-37) | Soluble | Solid | DI Leach | |
| 490-61841-2 | B-101 (43.5, 47-57) | Soluble | Solid | DI Leach | |
| 490-61841-3 | B-102 (3.5-7) | Soluble | Solid | DI Leach | |
| 490-61841-4 | B-102 (14-17, 17-27) | Soluble | Solid | DI Leach | |
| 490-61841-5 | B-102 (3a) | Soluble | Solid | DI Leach | |
| 490-61841-6 | B-116 (3.5-7) | Soluble | Solid | DI Leach | |
| 490-61841-7 | B-116 (7-17) | Soluble | Solid | DI Leach | |
| 490-61841-8 | B-117 (6-7, 7-17) | Soluble | Solid | DI Leach | |
| 490-61841-9 | B-117 (24.6) | Soluble | Solid | DI Leach | |
| 490-61841-10 | B-119 (7-17) | Soluble | Solid | DI Leach | |

QC Association Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

HPLC/IC (Continued)

Leach Batch: 192629 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 490-61841-11 | B-119 (17-27) | Soluble | Solid | DI Leach | |
| LCS 490-192629/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 490-192629/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| MB 490-192629/1-A | Method Blank | Soluble | Solid | DI Leach | |

Analysis Batch: 192913

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61390-A-1-B MS | Matrix Spike | Soluble | Solid | 9056A | 192629 |
| 490-61390-A-1-C MSD | Matrix Spike Duplicate | Soluble | Solid | 9056A | 192629 |
| 490-61841-1 | B-101 (17-27, 27-37) | Soluble | Solid | 9056A | 192629 |
| 490-61841-2 | B-101 (43.5, 47-57) | Soluble | Solid | 9056A | 192629 |
| 490-61841-3 | B-102 (3.5-7) | Soluble | Solid | 9056A | 192629 |
| 490-61841-4 | B-102 (14-17, 17-27) | Soluble | Solid | 9056A | 192629 |
| 490-61841-5 | B-102 (3a) | Soluble | Solid | 9056A | 192629 |
| 490-61841-6 | B-116 (3.5-7) | Soluble | Solid | 9056A | 192629 |
| 490-61841-7 | B-116 (7-17) | Soluble | Solid | 9056A | 192629 |
| 490-61841-8 | B-117 (6-7, 7-17) | Soluble | Solid | 9056A | 192629 |
| 490-61841-10 | B-119 (7-17) | Soluble | Solid | 9056A | 192629 |
| 490-61841-11 | B-119 (17-27) | Soluble | Solid | 9056A | 192629 |
| LCS 490-192629/2-A | Lab Control Sample | Soluble | Solid | 9056A | 192629 |
| LCSD 490-192629/3-A | Lab Control Sample Dup | Soluble | Solid | 9056A | 192629 |
| MB 490-192629/1-A | Method Blank | Soluble | Solid | 9056A | 192629 |

Analysis Batch: 193424

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-9 | B-117 (24.6) | Soluble | Solid | 9056A | 192629 |
| LCS 490-192629/2-A | Lab Control Sample | Soluble | Solid | 9056A | 192629 |
| LCSD 490-192629/3-A | Lab Control Sample Dup | Soluble | Solid | 9056A | 192629 |
| MB 490-192629/1-A | Method Blank | Soluble | Solid | 9056A | 192629 |

Metals

Leach Batch: 192343

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61889-B-1-H MS | Matrix Spike | TCLP | Solid | 1311 | |
| 490-61889-B-1-I MSD | Matrix Spike Duplicate | TCLP | Solid | 1311 | |
| LB 490-192343/1-C | Method Blank | TCLP | Solid | 1311 | |

Leach Batch: 192582

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 1311 | |
| 490-61841-1 MS | B-101 (17-27, 27-37) | TCLP | Solid | 1311 | |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | TCLP | Solid | 1311 | |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 1311 | |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 1311 | |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 1311 | |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 1311 | |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 1311 | |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 1311 | |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 1311 | |

QC Association Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Metals (Continued)

Leach Batch: 192582 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 1311 | |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 1311 | |
| 490-62014-B-2-E MS | Matrix Spike | TCLP | Solid | 1311 | |
| 490-62014-B-2-F MSD | Matrix Spike Duplicate | TCLP | Solid | 1311 | |
| LB 490-192582/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB 490-192582/1-C | Method Blank | TCLP | Solid | 1311 | |

Prep Batch: 192746

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 7470A | 192582 |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 7470A | 192582 |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 7470A | 192582 |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 7470A | 192582 |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 7470A | 192582 |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 7470A | 192582 |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 7470A | 192582 |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 7470A | 192582 |
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 7470A | 192582 |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 7470A | 192582 |
| 490-61889-B-1-H MS | Matrix Spike | TCLP | Solid | 7470A | 192343 |
| 490-61889-B-1-I MSD | Matrix Spike Duplicate | TCLP | Solid | 7470A | 192343 |
| LB 490-192343/1-C | Method Blank | TCLP | Solid | 7470A | 192343 |
| LCS 490-192746/4-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| MB 490-192746/1-A | Method Blank | Total/NA | Solid | 7470A | |

Prep Batch: 192747

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 7470A | 192854 |
| 490-62014-B-2-E MS | Matrix Spike | TCLP | Solid | 7470A | 192582 |
| 490-62014-B-2-F MSD | Matrix Spike Duplicate | TCLP | Solid | 7470A | 192582 |
| LB 490-192582/1-B | Method Blank | TCLP | Solid | 7470A | 192582 |
| LCS 490-192747/3-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| MB 490-192747/1-A | Method Blank | Total/NA | Solid | 7470A | |

Prep Batch: 192760

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 3010A | 192582 |
| 490-61841-1 MS | B-101 (17-27, 27-37) | TCLP | Solid | 3010A | 192582 |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | TCLP | Solid | 3010A | 192582 |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 3010A | 192582 |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 3010A | 192582 |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 3010A | 192582 |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 3010A | 192582 |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 3010A | 192582 |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 3010A | 192582 |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 3010A | 192582 |
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 3010A | 192582 |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 3010A | 192582 |
| LB 490-192582/1-C | Method Blank | TCLP | Solid | 3010A | 192582 |
| LCS 490-192760/3-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| MB 490-192760/1-A | Method Blank | Total/NA | Solid | 3010A | |

QC Association Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Metals (Continued)

Leach Batch: 192854

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 1311 | |
| 490-62081-A-1-C MS | Matrix Spike | TCLP | Solid | 1311 | |
| 490-62081-A-1-D MSD | Matrix Spike Duplicate | TCLP | Solid | 1311 | |
| LB 490-192854/1-B | Method Blank | TCLP | Solid | 1311 | |

Analysis Batch: 193047

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-1 MS | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 6010C | 192760 |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 6010C | 192760 |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 6010C | 192760 |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 6010C | 192760 |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 6010C | 192760 |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 6010C | 192760 |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 6010C | 192760 |
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 6010C | 192760 |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 6010C | 192760 |
| LB 490-192582/1-C | Method Blank | TCLP | Solid | 6010C | 192760 |
| LCS 490-192760/3-A | Lab Control Sample | Total/NA | Solid | 6010C | 192760 |
| MB 490-192760/1-A | Method Blank | Total/NA | Solid | 6010C | 192760 |

Prep Batch: 193131

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 3010A | 192854 |
| 490-62081-A-1-C MS | Matrix Spike | TCLP | Solid | 3010A | 192854 |
| 490-62081-A-1-D MSD | Matrix Spike Duplicate | TCLP | Solid | 3010A | 192854 |
| LB 490-192854/1-B | Method Blank | TCLP | Solid | 3010A | 192854 |
| LCS 490-193131/4-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| MB 490-193131/1-A | Method Blank | Total/NA | Solid | 3010A | |

Analysis Batch: 193183

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 7470A | 192746 |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 7470A | 192746 |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 7470A | 192746 |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 7470A | 192746 |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 7470A | 192746 |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 7470A | 192746 |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 7470A | 192746 |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 7470A | 192746 |
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 7470A | 192746 |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 7470A | 192746 |
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 7470A | 192747 |
| 490-61889-B-1-H MS | Matrix Spike | TCLP | Solid | 7470A | 192746 |
| 490-61889-B-1-I MSD | Matrix Spike Duplicate | TCLP | Solid | 7470A | 192746 |
| 490-62014-B-2-E MS | Matrix Spike | TCLP | Solid | 7470A | 192747 |
| 490-62014-B-2-F MSD | Matrix Spike Duplicate | TCLP | Solid | 7470A | 192747 |
| LB 490-192343/1-C | Method Blank | TCLP | Solid | 7470A | 192746 |
| LB 490-192582/1-B | Method Blank | TCLP | Solid | 7470A | 192747 |

QC Association Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Metals (Continued)

Analysis Batch: 193183 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 490-192746/4-A | Lab Control Sample | Total/NA | Solid | 7470A | 192746 |
| LCS 490-192747/3-A | Lab Control Sample | Total/NA | Solid | 7470A | 192747 |
| MB 490-192746/1-A | Method Blank | Total/NA | Solid | 7470A | 192746 |
| MB 490-192747/1-A | Method Blank | Total/NA | Solid | 7470A | 192747 |

Analysis Batch: 193262

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-1 MS | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-1 MSD | B-101 (17-27, 27-37) | TCLP | Solid | 6010C | 192760 |
| 490-61841-2 | B-101 (43.5, 47-57) | TCLP | Solid | 6010C | 192760 |
| 490-61841-3 | B-102 (3.5-7) | TCLP | Solid | 6010C | 192760 |
| 490-61841-4 | B-102 (14-17, 17-27) | TCLP | Solid | 6010C | 192760 |
| 490-61841-5 | B-102 (3a) | TCLP | Solid | 6010C | 192760 |
| 490-61841-6 | B-116 (3.5-7) | TCLP | Solid | 6010C | 192760 |
| 490-61841-7 | B-116 (7-17) | TCLP | Solid | 6010C | 192760 |
| 490-61841-8 | B-117 (6-7, 7-17) | TCLP | Solid | 6010C | 192760 |
| 490-61841-9 | B-117 (24.6) | TCLP | Solid | 6010C | 192760 |
| 490-61841-10 | B-119 (7-17) | TCLP | Solid | 6010C | 192760 |
| LB 490-192582/1-C | Method Blank | TCLP | Solid | 6010C | 192760 |
| LCS 490-192760/3-A | Lab Control Sample | Total/NA | Solid | 6010C | 192760 |
| MB 490-192760/1-A | Method Blank | Total/NA | Solid | 6010C | 192760 |

Analysis Batch: 193309

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| LCS 490-192760/3-A | Lab Control Sample | Total/NA | Solid | 6010C | 192760 |
| MB 490-192760/1-A | Method Blank | Total/NA | Solid | 6010C | 192760 |

Analysis Batch: 193350

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 6010C | 193131 |
| 490-62081-A-1-C MS | Matrix Spike | TCLP | Solid | 6010C | 193131 |
| 490-62081-A-1-D MSD | Matrix Spike Duplicate | TCLP | Solid | 6010C | 193131 |
| LB 490-192854/1-B | Method Blank | TCLP | Solid | 6010C | 193131 |
| LCS 490-193131/4-A | Lab Control Sample | Total/NA | Solid | 6010C | 193131 |
| MB 490-193131/1-A | Method Blank | Total/NA | Solid | 6010C | 193131 |

Analysis Batch: 193538

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 490-61841-11 | B-119 (17-27) | TCLP | Solid | 6010C | 193131 |
| 490-62081-A-1-C MS | Matrix Spike | TCLP | Solid | 6010C | 193131 |
| 490-62081-A-1-D MSD | Matrix Spike Duplicate | TCLP | Solid | 6010C | 193131 |
| LB 490-192854/1-B | Method Blank | TCLP | Solid | 6010C | 193131 |
| LCS 490-193131/4-A | Lab Control Sample | Total/NA | Solid | 6010C | 193131 |
| MB 490-193131/1-A | Method Blank | Total/NA | Solid | 6010C | 193131 |

QC Association Summary

Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

General Chemistry

Analysis Batch: 192382

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|----------------|----------------------|-----------|--------|----------|------------|
| 490-61841-1 | B-101 (17-27, 27-37) | Total/NA | Solid | Moisture | |
| 490-61841-1 DU | B-101 (17-27, 27-37) | Total/NA | Solid | Moisture | |
| 490-61841-2 | B-101 (43.5, 47-57) | Total/NA | Solid | Moisture | |
| 490-61841-3 | B-102 (3.5-7) | Total/NA | Solid | Moisture | |
| 490-61841-4 | B-102 (14-17, 17-27) | Total/NA | Solid | Moisture | |
| 490-61841-5 | B-102 (3a) | Total/NA | Solid | Moisture | |
| 490-61841-6 | B-116 (3.5-7) | Total/NA | Solid | Moisture | |
| 490-61841-7 | B-116 (7-17) | Total/NA | Solid | Moisture | |
| 490-61841-8 | B-117 (6-7, 7-17) | Total/NA | Solid | Moisture | |
| 490-61841-9 | B-117 (24.6) | Total/NA | Solid | Moisture | |
| 490-61841-10 | B-119 (7-17) | Total/NA | Solid | Moisture | |
| 490-61841-11 | B-119 (17-27) | Total/NA | Solid | Moisture | |



Lab Chronicle

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-101 (17-27, 27-37)

Lab Sample ID: 490-61841-1

Date Collected: 08/05/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 78.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 12:50 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 01:11 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:05 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:03 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:28 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-101 (43.5, 47-57)

Lab Sample ID: 490-61841-2

Date Collected: 08/06/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 75.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 13:59 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 01:31 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:28 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:25 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:29 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-102 (3.5-7)

Lab Sample ID: 490-61841-3

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 78.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 14:22 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 01:51 | CLN | TAL NSH |

Lab Chronicle

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-102 (3.5-7)

Lab Sample ID: 490-61841-3

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:31 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:28 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:34 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-102 (14-17, 17-27)

Lab Sample ID: 490-61841-4

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 76.9

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 14:45 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 02:51 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:35 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:32 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:36 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-102 (3a)

Lab Sample ID: 490-61841-5

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 76.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 15:55 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 03:11 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:38 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |

Lab Chronicle

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-102 (3a)

Lab Sample ID: 490-61841-5

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:35 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:37 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-116 (3.5-7)

Lab Sample ID: 490-61841-6

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 77.4

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 16:18 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 03:31 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:42 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:39 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:38 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-116 (7-17)

Lab Sample ID: 490-61841-7

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 74.8

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 16:41 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 03:51 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:45 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:42 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |

Lab Chronicle

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-116 (7-17)

Lab Sample ID: 490-61841-7

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:40 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-117 (6-7, 7-17)

Lab Sample ID: 490-61841-8

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 74.1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 17:04 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 04:11 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:49 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:46 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:41 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-117 (24.6)

Lab Sample ID: 490-61841-9

Date Collected: 08/07/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 86.2

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 17:27 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 100 | 193424 | 09/26/14 17:29 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:52 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 13:49 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:43 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Lab Chronicle

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Client Sample ID: B-119 (7-17)

Lab Sample ID: 490-61841-10

Date Collected: 08/08/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 75.3

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 17:50 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 04:51 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193047 | 09/24/14 22:56 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 192760 | 09/24/14 09:51 | TDP | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193262 | 09/25/14 14:04 | NLI | TAL NSH |
| TCLP | Leach | 1311 | | | 192582 | 09/23/14 13:08 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192746 | 09/24/14 09:17 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 10:44 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Client Sample ID: B-119 (17-27)

Lab Sample ID: 490-61841-11

Date Collected: 08/08/14 01:01

Matrix: Solid

Date Received: 09/19/14 08:30

Percent Solids: 71.0

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 3550C | | | 192666 | 09/23/14 16:56 | LDC | TAL NSH |
| Total/NA | Analysis | 8082A | | 1 | 193067 | 09/25/14 18:13 | HMT | TAL NSH |
| Soluble | Leach | DI Leach | | | 192629 | 09/23/14 15:43 | CLN | TAL NSH |
| Soluble | Analysis | 9056A | | 1 | 192913 | 09/25/14 05:11 | CLN | TAL NSH |
| TCLP | Leach | 1311 | | | 192854 | 09/24/14 12:55 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 193131 | 09/25/14 10:31 | ADN | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193350 | 09/25/14 21:20 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192854 | 09/24/14 12:55 | SJM | TAL NSH |
| TCLP | Prep | 3010A | | | 193131 | 09/25/14 10:31 | ADN | TAL NSH |
| TCLP | Analysis | 6010C | | 1 | 193538 | 09/26/14 13:54 | LTB | TAL NSH |
| TCLP | Leach | 1311 | | | 192854 | 09/24/14 12:55 | SJM | TAL NSH |
| TCLP | Prep | 7470A | | | 192747 | 09/25/14 11:11 | AAS | TAL NSH |
| TCLP | Analysis | 7470A | | 1 | 193183 | 09/25/14 11:23 | AAS | TAL NSH |
| Total/NA | Analysis | Moisture | | 1 | 192382 | 09/22/14 18:28 | AJK | TAL NSH |

Laboratory References:

EMLab Fort = EMLab P&K Fort Lauderdale, 6301 NW 5th Way, Suite 2850, Fort Lauderdale, FL 33309, TEL (954)776-8400
 TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Duke Energy Corporation
Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

| Method | Method Description | Protocol | Laboratory |
|----------|--|----------|------------|
| 8082A | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846 | TAL NSH |
| 9056A | Anions, Ion Chromatography | SW846 | TAL NSH |
| 6010C | Metals (ICP) | SW846 | TAL NSH |
| 7470A | Mercury (CVAA) | SW846 | TAL NSH |
| Moisture | Percent Moisture | EPA | TAL NSH |
| Asbestos | Asbestos in Soils | NONE | EMLab Fort |

Protocol References:

EPA = US Environmental Protection Agency

NONE = NONE

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EMLab Fort = EMLab P&K Fort Lauderdale, 6301 NW 5th Way, Suite 2850, Fort Lauderdale, FL 33309, TEL (954)776-8400

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



Certification Summary

Client: Duke Energy Corporation
 Project/Site: Riverbend Dry Stack Ash J14090369

TestAmerica Job ID: 490-61841-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|------------------------|---------------|------------|------------------|-----------------|
| A2LA | A2LA | | NA: NELAP & A2LA | 12-31-15 |
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-15 |
| Alaska (UST) | State Program | 10 | UST-087 | 10-31-14 |
| Arizona | State Program | 9 | AZ0473 | 05-05-15 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-15 |
| California | NELAP | 9 | 1168CA | 10-31-14 * |
| Connecticut | State Program | 1 | PH-0220 | 12-31-15 |
| Florida | NELAP | 4 | E87358 | 06-30-15 |
| Illinois | NELAP | 5 | 200010 | 12-09-14 |
| Iowa | State Program | 7 | 131 | 04-01-16 |
| Kansas | NELAP | 7 | E-10229 | 10-31-14 * |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-15 |
| Louisiana | NELAP | 6 | 30613 | 06-30-15 |
| Maryland | State Program | 3 | 316 | 03-31-15 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-15 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-14 |
| Mississippi | State Program | 4 | N/A | 06-30-15 |
| Montana (UST) | State Program | 8 | NA | 02-24-20 |
| Nevada | State Program | 9 | TN00032 | 07-31-15 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-14 * |
| New Jersey | NELAP | 2 | TN965 | 06-30-15 |
| New York | NELAP | 2 | 11342 | 03-31-15 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-14 |
| North Dakota | State Program | 8 | R-146 | 06-30-14 * |
| Ohio VAP | State Program | 5 | CL0033 | 10-16-15 |
| Oklahoma | State Program | 6 | 9412 | 08-31-15 |
| Oregon | NELAP | 10 | TN200001 | 04-29-15 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-15 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-14 |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-15 |
| South Carolina (DW) | State Program | 4 | 84009 (002) | 02-23-17 |
| Tennessee | State Program | 4 | 2008 | 02-23-17 |
| Texas | NELAP | 6 | T104704077 | 08-31-15 |
| USDA | Federal | | S-48469 | 10-30-16 |
| Utah | NELAP | 8 | TN00032 | 07-31-15 |
| Virginia | NELAP | 3 | 460152 | 06-14-15 |
| Washington | State Program | 10 | C789 | 07-19-15 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-15 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-15 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-15 |

* Certification renewal pending - certification considered valid.



Report for:

Ms. Shali Brown
TestAmerica-Nashville, TN
2960 Foster Creighton Drive
Nashville, TN 37204

Regarding: Project: 49002157; Riverbend Dry Stack Ash J14090369
EML ID: 1265721

Approved by:

A handwritten signature in black ink, appearing to read "Baluswamy Krishnan". The signature is written in a cursive style and is positioned above the printed name of the signatory.

Approved Signatory
Baluswamy Krishnan

Dates of Analysis:
Asbestos PLM: 09-26-2014

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K6301 NW 5th Way, Suite 2850, Ft. Lauderdale, FL 33309
(877) 711-8400 Fax (954) 776-8485 www.emlab.com

Client: TestAmerica-Nashville, TN

Date of Sampling: 08-05-2014

C/O: Ms. Shali Brown

Date of Receipt: 09-23-2014

Re: 49002157; Riverbend Dry Stack Ash J14090369

Date of Report: 09-26-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Total Samples Submitted:** 11**Total Samples Analysed:** 11**Total Samples with Layer Asbestos Content > 1%:** 0**Location: B-101 (17-27, 27-37)**

Lab ID-Version‡: 5760539-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: Moderate | |

Location: B-101 (43.5, 47-57)

Lab ID-Version‡: 5760540-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: Good | |

Location: B-102 (3.5-7)

Lab ID-Version‡: 5760541-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: Good | |

Location: B-102 (14-17, 17-27)

Lab ID-Version‡: 5760542-1

| Sample Layers | Asbestos Content |
|---|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: Good | |

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K6301 NW 5th Way, Suite 2850, Ft. Lauderdale, FL 33309
(877) 711-8400 Fax (954) 776-8485 www.emlab.com

Client: TestAmerica-Nashville, TN

Date of Sampling: 08-05-2014

C/O: Ms. Shali Brown

Date of Receipt: 09-23-2014

Re: 49002157; Riverbend Dry Stack Ash J14090369

Date of Report: 09-26-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: B-102 (3a)**

Lab ID-Version‡: 5760543-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Moderate |

Location: B-116 (3.5-7)

Lab ID-Version‡: 5760544-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

Location: B-116 (7-17)

Lab ID-Version‡: 5760545-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

Location: B-117 (6-7, 7-17)

Lab ID-Version‡: 5760546-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K6301 NW 5th Way, Suite 2850, Ft. Lauderdale, FL 33309
(877) 711-8400 Fax (954) 776-8485 www.emlab.com

Client: TestAmerica-Nashville, TN

Date of Sampling: 08-05-2014

C/O: Ms. Shali Brown

Date of Receipt: 09-23-2014

Re: 49002157; Riverbend Dry Stack Ash J14090369

Date of Report: 09-26-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: B-117 (24.6)**

Lab ID-Version‡: 5760547-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

Location: B-119 (7-17)

Lab ID-Version‡: 5760548-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

Location: B-119 (17-27)

Lab ID-Version‡: 5760549-1

| Sample Layers | Asbestos Content |
|--------------------------------------|------------------|
| Dark Gray Non-Fibrous Material | ND |
| Sample Composite Homogeneity: | Good |

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

COOLER RECEIPT FORM



490-81841 Chain of Custody

6008
2806

Cooler Received/Opened On 9/19/2014 @ 0830

1. Tracking # 8887 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 17960358

2. Temperature of rep. sample or temp blank when opened: 21.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO.. NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EUA

7. Were custody seals on containers: YES NO and Intact YES...NO.. NA

Were these signed and dated correctly? YES...NO.. NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry Ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES.. NO.. NA

b. Was there any observable headspace present in any VOA vial? YES...NO.. NA

14. Was there a Trip Blank in this cooler? YES...NO.. NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) D

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO.. NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO.. NA

16. Was residual chlorine present? YES...NO.. NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) W

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) J

I certify that I attached a label with the unique LIMS number to each container (initial) g

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES...NO...# 140533
140537



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Analytical Laboratory Services
 Mail Code MGO3A2 (Building 7405)
 13339 Hagers Ferry Rd
 Huntersville, N. C. 28078
 Fax: (980) 875-4349

Customer must Complete

1) Project Name: Riverbend Dry Stack Ash
 2) Phone No.:
 3) Client: Robert Wylie, Sean DeNeale, Andy Tinsley
 4) Fax No.:
 5) Business Unit:
 6) Project ID:
 7) Mail Code:
 8) Operating Unit:
 9) Activity ID:
 10) Process ID:

Important: When specific accounting has been established enter that accounting above. If specific accounting has not established we can work with just the Operating Unit and Process ID. THANKS!

| 11 Lab ID | 12 Chem Desktop No. | 13 Sample Description or ID | 14 Collection Information | | | 17 Comp. | 18 Grab | 16 Analyses Required | 8 RCRA Metals TCLP | PCB | Sulfate, Total | Asbestos | 20 Total # of Containers |
|-----------|---------------------|-----------------------------|---------------------------|------|-------------|----------|---------|----------------------|--------------------|-----|----------------|----------|--------------------------|
| | | | Date | Time | Signature | | | | | | | | |
| 417 | | B-101 (17-27, 27-37) | 8/5/14 | NA | [Signature] | | | X | X | X | X | | |
| 418 | | B-101 (43.5, 47-57) | 8/6/14 | | [Signature] | | | X | X | X | X | | |
| 419 | | B-102 (3.5-7) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 420 | | B-102 (14-17, 17-27) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 421 | | B-102 (39) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 422 | | B-116 (3.5-7) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 423 | | B-116 (7-17) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 424 | | B-117 (6-7, 7-17) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 425 | | B-117 (24.6) | 8/7/14 | | [Signature] | | | X | X | X | X | | |
| 426 | | B-119 (7-17) | 8/8/14 | | [Signature] | | | X | X | X | X | | |
| 427 | | B-119 (17-27) | 8/8/14 | | [Signature] | | | X | X | X | X | | |

Work Order: 54092349
 Logged by: DM
 Date & Time: 9/18/14 11:45
 Test America
 PO #658489
 Preservative: 1-HCl, 2-H2SO4, 3-HNO3, 4-None
 Samples: 5
 Originating From: [Blank]
 SAMPLE PROGRAM: Ground Water, NPDES, Other Plant, RCRA Waste
 Loc: 490
 61841

21) Relinquished By: [Signature] Date/Time: 9/18/14 10:30
 Relinquished By: [Signature] Date/Time: 9/18/14 10:30
 Relinquished By: [Signature] Date/Time: 9/18/14 10:30
 Sealed/Checked By: [Signature] Date/Time: 9/18/14 11:42
 Sealed/Checked By: [Signature] Date/Time: 9/18/14 11:42
 22) Requested Turnaround: 14 Days
 23) Comments: Samples collected in soil Tars bags & transferred to Lab bottles on 9/18/14
 48 Hr

Page 1 of 1
 DISTRIBUTION
 ORIGINAL TO LAB
 COPY TO CLIENT

TestAmerica Nashville
 2960 Foster-Craigton Drive
 Nashville, TN 37204
 Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record



TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)

Client Company: **TestAmerica Laboratories, Inc**
 Address: **6301 NW 5th Way, Suite 2850, Fort Lauderdale**
 City: **Fort Lauderdale**
 State: **FL** Zip: **33309**
 Phone: **954-776-3400(Tel) 954-xxx-xxxx(Fax)**
 Email: **WQ@t**

Sample: **Brown, Shell**
 Lab P/N: **Brown, Shell**
 Email: **shell.brown@testamerica.com**

Carrier Tracking No: **001265721**

Analysis Requested

DOC No: **490-29547-1**
 Page: **Page 1 of 1**
 Job #: **490-51841-1**

Project Name: **Rebrand Dry Stack Ach J14090389**
 Project #: **49002157**
 Site: **SSDWE**

Due Date Requested: **8/24/2014**
 FAT Requested (Y/N):

Field Filtered Sample (Y/N):

Preservation Codes:
 A - HCl
 D - NaOH
 M - Hexane
 N - None
 O - Acetic
 P - Nitric Acid
 R - NaOH
 S - H2SO4
 T - TSP Detergent
 U - Acetone
 V - MCA
 W - P1-45
 X - Other (Specify)

| Sample Identification - Client ID | Sample Date | Sample Time | Sample Type (Cen, Gr, etc) | Matrix (Asbestos, etc) | Field Filtered Sample (Y/N) | Sub (Asbestos) Asbestos | Special Instructions/Notes |
|-----------------------------------|-------------|-------------|----------------------------|------------------------|-----------------------------|-------------------------|----------------------------|
| B-101 (17-27, 27-37) | 8/6/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-101 (43.5, 47-57) | 8/6/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-102 (35-7) | 8/7/14 | 01:02 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-102 (14-17, 17-27) | 8/7/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-102 (9a) | 8/7/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-116 (3.5-7) | 8/7/14 | 01:03 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-116 (7-17) | 8/7/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-117 (6-7, 7-17) | 8/7/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-117 (24.6) | 8/7/14 | 01:03 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-119 (7-17) | 8/8/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |
| B-119 (17-27) | 8/8/14 | 01:01 | Eastern | Solid | X | X | Asbestos; due 8/28 |

Possible Hazard Identification
 Foreign Soil
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Date:

Relinquished by: **COSE** Date/Time: **9/23/14 12:03** Company: **TestAmerica**

Relinquished by: Date/Time: Company:

Custody Seal Impact: **A Yes B No** Custody Seal No.

Received by: Received by: Received by:
 Special Instructions/Requirements:
 Return To Client Special Instructions/Requirements:
 Disposal By Lab Archive For **Months**
 Date of Shipment: **9/23/14 4:50 PM** Company: **TestAmerica**

Login Sample Receipt Checklist

Client: Duke Energy Corporation

Job Number: 490-61841-1

Login Number: 61841**List Source: TestAmerica Nashville****List Number: 1****Creator: Buckingham, Paul**

| Question | Answer | Comment |
|--|--------|---------|
| Radioactivity wasn't checked or is \leq background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | False | |
| Cooler Temperature is acceptable. | False | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | False | |
| Residual Chlorine Checked. | N/A | |



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Analytical Laboratory Services

Mail Code MGO3A2 (Building 7405)
13339 Hagers Ferry Rd
Huntersville, N. C. 28078
(980) 875-5245
Fax: (980) 875-4349

Analytical Laboratory Use Only

| | | |
|-------------------------------|--|---|
| Work Order JH090329 | Matrix: | Samples Originating From NC SC OH |
| Logged by: DM | Date & Time 9/18/14 1145 | SAMPLE PROGRAM Ground Water NPDES Other Plant RCRA Waste |
| Ven Test America | ADD | |
| PO PO #658489 | ¹⁵ Preserv.: 1=HCl 2=H ₂ SO ₄ 3=HNO ₃ 4=Ice 5=None | |

| | | |
|--|-----------------|--|
| 1) Project Name Riverbend Dry Stack Ash | 2) Phone No: | 3) Client Robert Wylie, Sean DeNeale, Andy Tinsley |
| 5) Business Unit: | 6) Project ID: | 4) Fax No: |
| 8) Operating Unit: | 9) Activity ID: | 7) Mail Code: |
| 10) Process ID | | |
| Important: When specific accounting has been established enter that accounting above. If specific accounting has not established we can work with just the Operating Unit and Process ID. THANKS! | | |

| | | | | | | | | | | | | |
|---|--------------------|---------------------------------|--------------------|-----|----------------|----------|--|--|--|--|---------------------------------------|-------------------------------------|
| LOOK... Customer to complete all appropriate areas. | | ¹⁶ Analyses Required | 5 | 5 | 5 | 5 | | | | | Methods used must be SCDHEC certified | ²⁰ Total # of Containers |
| | | | 8 RCRA Metals TCLP | PCB | Sulfate, Total | Asbestos | | | | | | |
| ¹⁷ Comp. | ¹⁸ Grab | | | | | | | | | | | |

Customer must Complete

Customer to complete appropriate columns to right

| LAB USE ONLY | | 14 Collection Information | | | |
|--------------|---------------------|-----------------------------|--------|------|--------------------|
| 11 Lab ID | 12 Chem Desktop No. | 13 Sample Description or ID | Date | Time | Signature |
| 244057 417 | | B-101 (17-27, 27-37) | 8/5/14 | NA | <i>[Signature]</i> |
| 418 | | B-101 (435, 47-57) | 8/6/14 | | <i>[Signature]</i> |
| 419 | | B-102 (3.5-7) | 8/7/14 | | <i>[Signature]</i> |
| 420 | | B-102 (14-27, 17-27) | 8/7/14 | | <i>[Signature]</i> |
| 421 | | B-102 (3a) | 8/7/14 | | <i>[Signature]</i> |
| 422 | | B-116 (3.5-7) | 8/7/14 | | <i>[Signature]</i> |
| 423 | | B-116 (7-17) | 8/7/14 | | <i>[Signature]</i> |
| 424 | | B-117 (6-7, 7-17) | 8/7/14 | | <i>[Signature]</i> |
| 425 | | B-117 (24.6) | 8/7/14 | | <i>[Signature]</i> |
| 426 | | B-119 (7-17) | 8/8/14 | | <i>[Signature]</i> |
| 427 | | B-119 (17-27) | 8/8/14 | | <i>[Signature]</i> |

| | | | |
|---|------------------------------------|--|---|
| 21) Relinquished By <i>[Signature]</i> | Date/Time 9/18/14 / 1030 | Accepted By: <i>[Signature]</i> | Date/Time 3/15 10:30 am 9/18/14 |
| Relinquished By | Date/Time | Accepted By: | Date/Time |
| Relinquished By <i>[Signature]</i> | Date/Time 9/18/14 | Accepted By: <i>[Signature]</i> | Date/Time 9/18/14 125 |
| Sealed/Locked By | Date/Time | Sealed/Lock Opened By: <i>[Signature]</i> | Date/Time 9/18/14 1140 |
| 24) Comments Samples collected in soil jars/bags & transferred to Lab bottles on 9/18/14 | | | |

| |
|--------------------------|
| 22) Requested Turnaround |
| 14 Days 9/29/14 |
| - 48 Hr _____ |
| * Other 24 Hr _____ |
| * Add. Cost Will Apply |



Environmental Chemists, Inc.

6602 Windmill Way • Wilmington, NC 28405
 (910) 392-0223 (Lab) • (910) 392-4424 (Fax)
 710 Bowsertown Road • Manteo, NC 27954
 (252) 473-5702

ANALYTICAL & CONSULTING
 CHEMISTS

NCDENR: DWQ CERTIFICATE #94. DLS CERTIFICATE #37729

Progress Energy - L.V. Sutton Plant

801 Sutton Plant Road
 Wilmington NC 28401
 Attention: R. Kent Tyndall

Date of Report: Jun 28, 2012
Customer PO #:
Report #: 2012-06128
Report to: R. Kent Tyndall
Project ID:

| Lab ID | Sample ID: | Collect Date/Time | Matrix | Sampled by |
|---------------------------------|--------------------------|-------------------|---------------|------------|
| 12-14940 | Site: Ash Sample | 6/8/2012 2:00 PM | Solid/Sludge | Greg Brown |
| Test | Method | Results | Date Analyzed | |
| Total Solids (%) | SM 2540 B | 61.2 % | 06/12/2012 | |
| Chlordane | SW 846 Method 8081B/3510 | <0.0005 mg/L | 06/21/2012 | |
| Endrin | SW 846 Method 8081B/3510 | <0.00015 mg/L | 06/21/2012 | |
| Heptachlor | SW 846 Method 8081B/3510 | <0.00015 mg/L | 06/21/2012 | |
| Heptachlor epoxide | SW 846 Method 8081B/3510 | <0.00015 mg/L | 06/21/2012 | |
| Lindane | SW 846 Method 8081B/3510 | <0.00015 mg/L | 06/21/2012 | |
| Methoxychlor | SW 846 Method 8081B/3510 | <0.00015 mg/L | 06/21/2012 | |
| Toxaphene | SW 846 Method 8081B/3510 | <0.0005 mg/L | 06/21/2012 | |
| 1,4-Dichlorobenzene (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| 2,4,5-Trichlorophenol (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| 2,4,6-Trichlorophenol (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| 2,4-Dinitrotoluene (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Cresol (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Hexachloro-1,3-butadiene (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Hexachlorobenzene (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Hexachloroethane (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| m + p-Cresol (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Nitrobenzene (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| o-Cresol (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| Pentachlorophenol (TCLP) | SW 846 method 8270/3510 | <0.025 mg/L | 06/11/2012 | |
| Pyridine (TCLP) | SW 846 method 8270/3510 | <0.005 mg/L | 06/11/2012 | |
| 2,4,5-TP | SW846 Method 8151A | <0.00333 mg/L | 06/25/2012 | |
| 2,4-D | SW846 Method 8151A | <0.0133 mg/L | 06/25/2012 | |
| 1,1-Dichloroethylene | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 | |
| 1,2-Dichloroethane | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 | |
| Benzene | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 | |
| Carbon Tetrachloride | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 | |



Environmental Chemists, Inc.

6602 Windmill Way • Wilmington, NC 28405
(910) 392-0223 (Lab) • (910) 392-4424 (Fax)
710 Bowsertown Road • Manteo, NC 27954
(252) 473-5702

ANALYTICAL & CONSULTING
CHEMISTS

NCDENR: DWQ CERTIFICATE #94. DLS CERTIFICATE #37729

Progress Energy - L.V. Sutton Plant

801 Sutton Plant Road
Wilmington NC 28401
Attention: R. Kent Tyndall

Date of Report: Jun 28, 2012
Customer PO #:
Report #: 2012-06128
Report to: R. Kent Tyndall
Project ID:

| | | | |
|---------------------|------------------------|-------------|------------|
| Chlorobenzene | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 |
| Chloroform | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 |
| Methyl ethyl ketone | SW846 Method 8260/5030 | < 0.05 mg/L | 6/19/2012 |
| Tetrachloroethylene | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 |
| Trichloroethylene | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 |
| Vinyl Chloride | SW846 Method 8260/5030 | < 0.01 mg/L | 6/19/2012 |
| TCLP Metals | | | |
| Arsenic | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Barium | EPA 200.7 | 3.00 mg/L | 06/14/2012 |
| Cadmium | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Chromium | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Lead | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Selenium | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Silver | EPA 200.7 | <0.100 mg/L | 06/14/2012 |
| Mercury | EPA 245.1 | <0.002 mg/L | 06/28/2012 |

Comment:

Reviewed by:

ENVIRONMENTAL CHEMISTS, INC

Sample Collection and Chain of Custody

NCDENR: DWQ Certificate #94, DLS Certificate #37729

Analytical & Consulting Chemists

Client: Progress Energy-Sutton Plant, 801 Sutton Steam Plant Rd, Wilmington, NC 28401

Collected By: Greg Brown

Email: kechemw@aol.com

Report No: 12-6128

6602 Windmill Way
Wilmington, NC 28405
Phone: (910) 392-0223
Fax: (910) 392-4424

Sample Type: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge Other:

| Sample Identification | Collection | | Sample Type | Composite or Grab | Container (P or G) | Chlorine mg/L | LAB ID NUMBER | PRESERVATION | | | | | | ANALYSIS REQUESTED | | |
|--|------------|------|-------------|-------------------|--------------------|---------------|---------------|--------------|------|-----|--------------------------------|------------------|------|--------------------|------|---|
| | DATE | TIME | | | | | | TEMP | NONE | HCL | H ₂ SO ₄ | HNO ₃ | NaOH | | THIO | OTHER |
| ash | | | | | | | | | | | | | | | | |
| Sample | 6/8/12 | 2 pm | - | C | P | | 14940 | X | | | | | | | | See attached email for analysis requested |
| (Invoice this test separately from all others) | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |
| | | | | C | P | | | | | | | | | | | 8 RCRA Metal TCLP (** RUSH **) |

NOTICE - DECHLORINATION: Samples for Ammonia, TKN, Cyanide, Phenol, and Bacteria must be dechlorinated (0.2 ppm or less) in the field at the time of collection. See reverse side for instructions.

Transfer

Relinquished By: Kent Tyndall Date/Time: 6/8/12 2:30 PM

Received By: _____ Date/Time: _____

Temperature when Received: _____ Accepted:

Delivered By: Kent Tyndall Received By: _____ Rejected: _____ Resample Requested: _____

Comments: Full TCLP analysis by SW-846 1311, 8260, 8270, 8081, 8151, and RCRA-8 metals Date: 6/8/12 Time: 1:55 PM