

DENR USE ONLY: Paper Report Electronic Data - Email CD (data loaded: Yes / No)

Doc/Event #:

NC DENR

Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.)
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B 1629 (4)(a)(i)).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Duke Energy, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Sean DeNeale

Phone: (704) 382-4761

E-mail: Sean.DeNeale@duke-energy.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Retired Ash Basin (RAB) Ash Landfill Duke Energy Allen Steam Station	253 Plant Allen Rd. Beimont, NC 28012	36-12	.0500	March 5, 2012

Environmental Status: (Check all that apply)

- Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

- Groundwater monitoring data from monitoring wells Methane gas monitoring data
 Groundwater monitoring data from private water supply wells Corrective action data (specify) _____
 Leachate monitoring data Other(specify) _____
 Surface water monitoring data

Notification attached?

- No. No groundwater or surface water standards were exceeded.
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

D. Edwin M. Sullivan, P.E.

Consulting Engineer

(980) 373-3719

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

D. Edwin M. Sullivan
Signature

04/13/2012

Date

Affix NC Licensed Professional Geologist Seal

Duke Energy Corporation, Mail Code EC13K, P.O. Box 1006, Charlotte, NC 28201-1006

Facility Representative Address

#F-0566

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009





526 South Church Street
Charlotte, NC 28202

Mailing Address:
PO Box 1006
Mail Code EC13K
Charlotte, NC 28201-1006

704 382 4761

704 382 6240 fax

April 13, 2012

Ms. Elizabeth Werner
North Carolina Department of Environment and Natural Resources
Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

Subject: Semi-annual Leachate Sampling Results
Duke Energy Carolinas, LLC
Allen Steam Station
Retired Ash Basin (RAB) Ash Landfill, Phase I, Cells 1 and 2, Permit #36-12

Dear Ms. Werner:

In accordance with the landfill *Operations Plan*, Duke Energy is providing the results of semi-annual leachate sampling for the Allen Retired Ash Basin (RAB) Ash Landfill located in Belmont, North Carolina.

On March 5, 2012, leachate samples were collected from the leachate collection system. The samples were collected by Duke Energy personnel. A summary of sampling results can be found in Table 1. As noted in the table, 15 NCAC 2L .0202 standards are provided for reference only. The parameters tested are not bound by state groundwater or surface water standards. The leachate is conveyed to the station's ash impoundment, which discharges via a NPDES permitted outfall. All laboratory analytical and field results are provided as Attachments 1 and 2, respectively.

Duke Energy personnel had previously sampled landfill leachate at Allen Steam Station semi-annually during June and December. Beginning in March 2012, as approved during our November 1, 2011 phone conversation, Duke Energy has transitioned to semi-annual sampling during March and September to better align with other on-site sampling. Henceforth, and unless otherwise approved, all semi-annual sampling will occur during March and September. Therefore, the next landfill leachate sampling event will occur in September 2012 with documentation to follow.

If you have any questions or concerns, please contact me at 704-382-4761 or at Sean.DeNeale@duke-energy.com

Sincerely,

Sean DeNeale, Engineer I
Environment, Health & Safety

Cc: Mr. Don Scruggs – Allen Steam Station
Mr. Ed Sullivan – Duke Energy Corporation

Table 1
 Allen Steam Station
 Retired Ash Basin (RAB) Ash Landfill (Permit No. 36-12)
 Leachate Analytical Data

	15A NCAC 2L .0202 Standard	Analytical Result (ug/L)	
Constituent	(ug/L)	03/05/2012	
		Cell 1	Cell 2
Arsenic	10	81.1	40.2
Barium	700	43	58
Boron	700	7,520	2,160
Cadmium	2	1.74	3.61
Chloride	250 mg/L	13 mg/L	2.3 mg/L
Chromium	10	< 5	7
Copper	1 mg/L	0.045 mg/L	0.095 mg/L
Fluoride	2 mg/L	1.3 mg/L	3.3 mg/L
Iron	300	86	174
Lead	15	< 1.00	< 1.00
Manganese	50	3,370	3,660
Mercury	1	< 0.05	< 0.05
Nickel	100	168	261
Nitrate	10 mg/L	25 mg/L	19 mg/L
pH	6.5-8.5	3.93	4.40
Selenium	20	49.3	71.8
Silver	20	< 5	< 5
Sulfate	250 mg/L	470 mg/L	730 mg/L
Temperature (°C)	n/a	14.34	14.07
TDS	500 mg/L	741 mg/L	1,110 mg/L
Zinc	1 mg/L	0.203 mg/L	0.357 mg/L

NOTE: 15A NCAC 2L .0202 Standards are provided only for reference. Analytical results are for landfill leachate, which is **NOT** bound by state groundwater or surface water standards. Landfill leachate is conveyed to the station's ash impoundment, which discharges via a NPDES permitted outfall.

Attachment 1

Allen Retired Ash Basin (RAB) Ash Landfill

Semi-Annual Monitoring Event

Leachate Analytical Results

March 5, 2012



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: J12020434

Customer Name(s): Don Scruggs

Customer Address: 253 Plant Allen Road

Belmont, NC 28012

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

Report Authorized By:
(Signature)

Digitally signed by jay perkins
DN: cn=jay perkins, o=Analytical
Lab, ou, email=jay.perkins@duke-
energy.com, c=US
Date: 2012.03.22 13:44:46 -04'00'

Date:

3/21/2012

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.

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
2012004653	ALLEN	05-Mar-12 7:05 AM	LDC	LEACHATE LCS-CELL 1
2012004654	ALLEN	05-Mar-12 7:25 AM	LDC	LEACHATE LCS-CELL 2
2012004655	ALLEN	05-Mar-12 3:20 PM	LDC	FIELD BLANK
3 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
- The Vendor Laboratories have been qualified by the Analytical Laboratory Yes

Report Sections Included:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Job Summary Report | <input checked="" type="checkbox"/> Sub-contracted Laboratory Results |
| <input checked="" type="checkbox"/> Sample Identification | <input type="checkbox"/> Customer Specific Data Sheets, Reports, & Documentation |
| <input checked="" type="checkbox"/> Technical Validation of Data Package | <input type="checkbox"/> Customer Database Entries |
| <input checked="" type="checkbox"/> Analytical Laboratory Certificate of Analysis | <input checked="" type="checkbox"/> Chain of Custody |
| <input type="checkbox"/> Analytical Laboratory QC Report | <input checked="" type="checkbox"/> Electronic Data Deliverable (EDD) Sent Separately |

Reviewed By: Mary Ann Ogle

Date: 3/21/2012

Certificate of Laboratory Analysis

This report shall not be reproduced, except in full.

Order # J12020434

Site: LEACHATE LCS-CELL 1

Collection Date: 05-Mar-12 7:05 AM

Sample #: 2012004653

Matrix: GW_RCRA

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>INORGANIC IONS BY IC</u>								
Chloride	13	mg/L		1	10	EPA 300.0	06-Mar-12 17:39	JAHERMA
Fluoride	1.3	mg/L		1	10	EPA 300.0	06-Mar-12 17:39	JAHERMA
Nitrate	25	mg/L		1	10	EPA 300.0	06-Mar-12 17:39	JAHERMA
Nitrate as N	5.6	mg-N/L		0.023	1	EPA 300.0	06-Mar-12 17:39	JAHERMA
Sulfate	470	mg/L		10	100	EPA 300.0	06-Mar-12 17:39	JAHERMA
<u>MERCURY (COLD VAPOR) IN WATER</u>								
Mercury (Hg)	< 0.05	ug/L		0.05	1	EPA 245.1	09-Mar-12 08:19	AGIBBS
<u>TOTAL EXTRACTABLE METALS BY ICP</u>								
Barium (Ba)	0.043	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Boron (B)	7.52	mg/L		0.05	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Chromium (Cr)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Copper (Cu)	0.045	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Iron (Fe)	0.086	mg/L		0.01	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Manganese (Mn)	3.37	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Nickel (Ni)	0.168	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Silver (Ag)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
Zinc (Zn)	0.203	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:30	DJSULL1
<u>TOTAL EXTRACTABLE METALS BY ICP-MS</u>								
Arsenic (As)	81.1	ug/L		1	1	EPA 200.8	08-Mar-12 15:12	KRICHAR
Cadmium (Cd)	1.74	ug/L		1	1	EPA 200.8	08-Mar-12 15:12	KRICHAR
Lead (Pb)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:12	KRICHAR
Selenium (Se)	49.3	ug/L		1	1	EPA 200.8	08-Mar-12 15:12	KRICHAR
<u>TOTAL DISSOLVED SOLIDS</u>								
Vendor Parameter	Complete				1	V_PACE		

Certificate of Laboratory Analysis

This report shall not be reproduced, except in full.

Order # J12020434

Site: LEACHATE LCS-CELL 2

Collection Date: 05-Mar-12 7:25 AM

Sample #: 2012004654

Matrix: GW_RCRA

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>INORGANIC IONS BY IC</u>								
Chloride	2.3	mg/L		0.1	1	EPA 300.0	07-Mar-12 12:34	JAHERMA
Fluoride	3.3	mg/L		1	10	EPA 300.0	07-Mar-12 12:34	JAHERMA
Nitrate	19	mg/L		1	10	EPA 300.0	07-Mar-12 12:34	JAHERMA
Nitrate as N	4.3	mg-N/L		0.023	1	EPA 300.0	07-Mar-12 12:34	JAHERMA
Sulfate	730	mg/L		10	100	EPA 300.0	07-Mar-12 12:34	JAHERMA
<u>MERCURY (COLD VAPOR) IN WATER</u>								
Mercury (Hg)	< 0.05	ug/L		0.05	1	EPA 245.1	09-Mar-12 08:21	AGIBBS
<u>TOTAL EXTRACTABLE METALS BY ICP</u>								
Barium (Ba)	0.058	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Boron (B)	2.16	mg/L		0.05	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Chromium (Cr)	0.007	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Copper (Cu)	0.095	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Iron (Fe)	0.174	mg/L		0.01	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Manganese (Mn)	3.66	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Nickel (Ni)	0.261	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Silver (Ag)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
Zinc (Zn)	0.357	mg/L		0.005	1	EPA 200.7	09-Mar-12 11:32	DJSULL1
<u>TOTAL EXTRACTABLE METALS BY ICP-MS</u>								
Arsenic (As)	40.2	ug/L		1	1	EPA 200.8	08-Mar-12 15:15	KRICHAR
Cadmium (Cd)	3.61	ug/L		1	1	EPA 200.8	08-Mar-12 15:15	KRICHAR
Lead (Pb)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:15	KRICHAR
Selenium (Se)	71.8	ug/L		1	1	EPA 200.8	08-Mar-12 15:15	KRICHAR
<u>TOTAL DISSOLVED SOLIDS</u>								
Vendor Parameter	Complete				1	V_PACE		

Site: FIELD BLANK

Collection Date: 05-Mar-12 3:20 PM

Sample #: 2012004655

Matrix: GW_RCRA

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>INORGANIC IONS BY IC</u>								
Chloride	< 0.10	mg/L		0.1	1	EPA 300.0	07-Mar-12 09:55	JAHERMA
Fluoride	< 0.10	mg/L		0.1	1	EPA 300.0	07-Mar-12 09:55	JAHERMA
Nitrate	< 0.10	mg/L		0.1	1	EPA 300.0	07-Mar-12 09:55	JAHERMA
Nitrate as N	< 0.02	mg-N/L		0.023	1	EPA 300.0	07-Mar-12 09:55	JAHERMA
Sulfate	< 0.10	mg/L		0.1	1	EPA 300.0	07-Mar-12 09:55	JAHERMA

Certificate of Laboratory Analysis

This report shall not be reproduced, except in full.

Order # J12020434

Site: FIELD BLANK

Collection Date: 05-Mar-12 3:20 PM

Sample #: **2012004655**

Matrix: GW_RCRA

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>MERCURY (COLD VAPOR) IN WATER</u>								
Mercury (Hg)	< 0.05	ug/L		0.05	1	EPA 245.1	09-Mar-12 08:24	AGIBBS
<u>TOTAL EXTRACTABLE METALS BY ICP</u>								
Barium (Ba)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Boron (B)	< 0.050	mg/L		0.05	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Chromium (Cr)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Copper (Cu)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Iron (Fe)	0.017	mg/L		0.01	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Manganese (Mn)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Nickel (Ni)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Silver (Ag)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
Zinc (Zn)	< 0.005	mg/L		0.005	1	EPA 200.7	09-Mar-12 10:45	DJSULL1
<u>TOTAL EXTRACTABLE METALS BY ICP-MS</u>								
Arsenic (As)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:18	KRICHAR
Cadmium (Cd)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:18	KRICHAR
Lead (Pb)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:18	KRICHAR
Selenium (Se)	< 1.00	ug/L		1	1	EPA 200.8	08-Mar-12 15:18	KRICHAR

March 21, 2012

Terry Whitner
Duke Energy Carolinas, LLC
PO Box 37929
DPEHS
Charlotte, NC 28237

RE: Project: J12020434
Pace Project No.: 92114662

Dear Terry Whitner:

Enclosed are the analytical results for sample(s) received by the laboratory on March 06, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Mr. Jay Perkins, Duke Energy



REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.
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(828)254-7176

Pace Analytical Services, Inc.
3000 Roney Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: J12020434
Pace Project No.: 92114662

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001
Virginia Certification #: 00072
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460147



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(828)254-7176

Pace Analytical Services, Inc.
3000 Roney Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: J12020434

Pace Project No.: 92114662

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92113415014	LEACHATE LCS - CELL 1	SM 2540C	SMW	1	PASI-A
92113415015	LEACHATE LCS - CELL 2	SM 2540C	SMW	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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HITS ONLY

Project: J12020434

Pace Project No.: 92114662

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92113415014	LEACHATE LCS - CELL 1					
SM 2540C	Total Dissolved Solids	741	mg/L	25.0	03/09/12 09:14	
92113415015	LEACHATE LCS - CELL 2					
SM 2540C	Total Dissolved Solids	1110	mg/L	25.0	03/09/12 09:15	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: J12020434

Pace Project No.: 92114662

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: Duke Energy

Date: March 21, 2012

General Information:

2 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



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 (336)623-8921

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 (828)254-7176

Pace Analytical Services, Inc.
 800 Kincaid Ave. Suite 100
 Huntersville, NC 28078
 (704)875-9092

ANALYTICAL RESULTS

Project: J12020434
 Pace Project No.: 92114662

Sample: LEACHATE LCS - CELL 1		Lab ID: 92113415014	Collected: 03/05/12 07:05	Received: 03/06/12 11:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids		Analytical Method: SM 2540C						
Total Dissolved Solids	741	mg/L	25.0	1		03/09/12 09:14		

ANALYTICAL RESULTS

Project: J12020434

Pace Project No.: 92114662

Sample: LEACHATE LCS - CELL 2		Lab ID: 92113415015	Collected: 03/05/12 07:25	Received: 03/06/12 11:11	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

2540C Total Dissolved Solids Analytical Method: SM 2540C

Total Dissolved Solids	1110 mg/L	25.0	1		03/09/12 09:15
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QUALITY CONTROL DATA

Project: J12020434
Pace Project No.: 92114662

QC Batch: WET/20020 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 92113415014, 92113415015

METHOD BLANK: 732657 Matrix: Water

Associated Lab Samples: 92113415014, 92113415015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	03/09/12 09:08	

LABORATORY CONTROL SAMPLE: 732658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	240	96	80-120	

SAMPLE DUPLICATE: 732660

Parameter	Units	92113415014 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	741	753	2	

SAMPLE DUPLICATE: 732680

Parameter	Units	92113415005 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	204	198	3	



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(704)875-9092

QUALIFIERS

Project: J12020434
Pace Project No.: 92114662

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: J12020434

Pace Project No.: 92114662

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92113415014	LEACHATE LCS - CELL 1	SM 2540C	WET/20020		
92113415015	LEACHATE LCS - CELL 2	SM 2540C	WET/20020		



For Detailed Instructions, see:
<http://dewww/essenvi/coc/>

Duke Energy Analytical Lab Services
 Mail Code MGO3A2 (Building 7405)
 13339 Hagers Ferry Rd
 Huntersville, N. C. 28078
 (704) 875-5245
 Fax: (704) 875-5038

1) Project Name: PLANT ALLEN - LEACHATE COLLECTION SYSTEM
 2) Phone No: 875-5257
 3) Client: LDC / Don Scruggs
 4) Fax No: 875-4349
 5) Business Unit: 20035
 6) Process: BENVWS
 7) Resp. To: AS00
 8) Project ID:
 9) Activity ID:
 10) Mail Code: MGO3A3

Customer to complete appropriate columns to right

12) Chem Desktop No.	13) Sample Description or ID
2012004653	LEACHATE LCS - CELL 1
2012004654	LEACHATE LCS - CELL 2
2012004655	FIELD BLANK

Customer to sign & date below

21) Relinquished By: *ho* Date/Time: 3/6/12 0725
 Relinquished By: *Candy Rmax* Date/Time: 3-6-12 1047
 Relinquished By: _____ Date/Time: _____
 23) Seal/Locked By: _____ Date/Time: _____
 24) Comments: Use indicated or comparable methods

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Analytical Laboratory Use Only

LIMS # J12020434 MATRIX: GW-RCRA
 Logged By: *cpb* Date & Time: 3-6-12 0737
 VENDOR: *Pace*
 PO #: *21*
 MR #: _____
 Cooler Temp (C): _____
 16) Preserv.: 1=HCL, 2=H2SO4, 3=HNO3, 4=lbe, 5=None

16) Analyses Required: _____
 17) Comp.: _____
 18) Grab: _____

Customer to complete all appropriate NON-SHADED areas.

14) Collection Information		Date	Time	Signature
		3/5/12	0705	<i>WOC</i>
		3/5/12	0725	<i>WOC</i>
		3/5/12	1520	<i>WOC</i>

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 DISTRIBUTION ORIGINAL TO LAB, COPY TO CLIENT
 Rev 11/4/11

19) Samples Originating From:	20) Total # of Containers
3) Ground Water	4
4) Drinking Water	4
5) RCRA Waste	3

22) Requested Turnaround
 14 Days
 7 Days _____
 48 Hr _____
 *Other: *3-13-7*
 *Add. Cost Will Apply

Attachment 2

Allen Retired Ash Basin (RAB) Ash Landfill

Semi-Annual Monitoring Event

Leachate Field Results

March 5, 2012

**ALLEN STEAM STATION
LEACHATE COLLECTION SYSTEM
GROUNDWATER MONITORING FIELD DATA**

DATE	WELL NUMBER	WELL DEPTH (feet)	DEPTH TO WATER (feet)	ODOR	WELL VOL (gal)	EVAC VOL (gal)	COMP EVAC (yes/no)	TEMPERATURE (deg C)	pH (units)	SPEC COND (umho/cm)	TURBIDITY (ntu)
3/5/2012	LCS - CELL 1	N/A	N/A	N/A	N/A	2.00	N/A	14.34	3.93	986	5
3/5/2012	LCS - CELL 2	N/A	N/A	N/A	N/A	2.00	N/A	14.07	4.40	1296	27