

Covanta Lee, Inc.
A Covanta Energy Company
10500 Buckingham Road
Fort Myers, FL 33905
Tel 239 337 2200
Fax 239 337 2510

January 5, 2011

Mr. Philip Barbaccia
Solid Waste Section
Florida Department of Environmental Protection
South District Office
2295 Victoria Avenue
Fort Myers, Florida 33901

RE: 2010 Ash Residue Summary Report

Dear Mr. Barbaccia,

In accordance with the requirements of Chapter 62-702 F.A.C., attached please find the 2010 ash residue summary report for the Lee County Solid Waste Resource Recovery Facility.

If you have any questions regarding this matter, please do not hesitate to contact me. I can be reached during the day at (239) 337-2200, Extension 228.

Sincerely,



Michael Duff
Facility Manager

cc: L. Sampson
K. Chardo (File)
DEP Siting Office

RECEIVED

JAN 06 2011

D.E.P. South District

**LEE COUNTY SOLID WASTE RESOURCE RECOVERY
(OPERATED BY: COVANTA LEE, INC.)**

ENVIRONMENTAL TEST REPORT

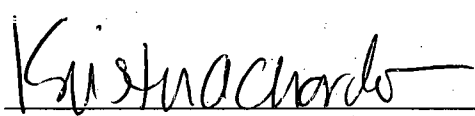
PREPARED FOR: Lee County Solid Waste Resource Recovery Facility
Covanta Lee, Inc.
10500 Buckingham Road Suite 400
Fort Myers, Florida 33905

REGARDING: FDEP Rule: 62-702 F.A.C.

**ASSOCIATED
REGULATORY
AGENCIES:** Florida Department of Environmental Protection
South District Office
Solid Waste Management Division
2295 Victoria Avenue Suite
Ft. Myers, Florida 33901

PURPOSE: Ash Residue Analysis Summary

SAMPLE PERIOD: January through December 2010

PREPARED BY: 
Kristen A. Chardo, Environmental Specialist

DATE ISSUED: January 5, 2011

RECEIVED

JAN 06 2011

D.E.P. South District

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1.0 INTRODUCTION

Prepared in accordance with the Florida Department of Environmental Protection (FDEP) Rule 62-702 F.A.C., for Solid Waste Combustor Ash Management, the 2010 Annual Ash Residue Analysis Summary report provides the quarterly total metal results for the Lee County Solid Waste Resource Recovery Facility. On a quarterly basis, the ash residue composite samples were analyzed for total metals utilizing Environmental Protection Agency (EPA) Method 3050, Acid Digestion of Sediments, Sludges, and Soils.

2.0 FIELD ASH SAMPLING PROCEDURES

On a monthly basis, combined ash samples were collected at ten-minute intervals for four consecutive hours, in accordance with the procedures outlined in the FDEP Quality Assurance Standard Operating Procedures Manual for Sampling Ash Residue from Solid Waste Combustors. Each monthly sample was composited and placed in an airtight storage container, and labeled appropriately. At the end of each quarter, the three monthly composite samples were combined to form the quarterly composite sample. Sanders Laboratories, Inc. (Covanta Lee's contracted laboratory) performed the analysis on the quarterly composite sample.

One sample per quarter, typically collected during the last month of the quarter, was analyzed for mercury via EPA Method 7470. [Note: The mercury analysis is performed once per quarter, since analyzing the quarterly composite sample would exceed the holding time specified in the analytical method.]

3.0 LABORATORY INFORMATION

Sanders Laboratories, Inc., an independently owned and operated laboratory, was contracted by Covanta Lee, Inc. to collect and analyze the combined ash residue samples. Additionally, Sanders Laboratories prepares (via drying, crushing, and rifling) the samples for analysis, and provides a report that presents the analytical data on a dry ash basis.

Covanta Lee has instructed affected Sanders Laboratories representatives on the proper handling of the ash residue from the combustion of solid waste.

4.0 RESULTS

The total metals results on a "dry metal" basis are presented in Table 1. Table 2 presents the total metals results on an "as received" basis. The "as received" basis is determined by the following calculation:

$$\text{As received = (mg/Kg)} = \frac{\text{Dry Weight Concentration (mg/Kg)} * \text{Dry Ash Sample Weight}}{\text{Gross Reduced Sample Weight}}$$

** The "dry weight" concentration is the concentration that results from the crushed, dried, and riffled ash samples. The "as received" values represent the ash condition as delivered to the landfill, which includes moisture.*

**TABLE 1: LEE COUNTY SOLID WASTE RESOURCE RECOVERY FACILITY
2010 ASH RESIDUE TOTAL METALS ANALYSIS RESULTS (mg/Kg) ON A DRY ASH BASIS**

Sampling Period	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Copper (mg/Kg)	Lead (mg/Kg)	Nickel (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Moisture Content %
1st Quarter	108	61.0	<0.47	69.6	69.6	771	2,610	58.5	<2.99	4.23	<7.96	4,480	19.6
2nd Quarter	134	48.7	0.19	60.9	53.6	1,040	487	23.1	<0.83	4.63	<2.19	4,750	20.4
3rd Quarter	115	60.7	0.38	80.9	64.5	632	518	29.1	<4.17	6.19	0.16	4,300	20.9
4th Quarter	188	85.1	0.34	138	76.4	2,000	751	53.8	1.88	7.88	7.51	7,510	20.1

**TABLE 2 - LEE COUNTY SOLID WASTE RESOURCE RECOVERY FACILITY
2010 ASH RESIDUE TOTAL METALS ANALYSIS RESULTS (mg/Kg) ON AN "AS RECEIVED" BASIS**

Sampling Period	Sample ID	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Copper (mg/Kg)	Lead (mg/Kg)	Nickel (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)
1st Quarter	N0903297-01	87	49.1	<0.47	56.0	56.0	620	2099	47	<2.99	3.4	<7.96	3603
2nd Quarter	N1006074-01	106.7	38.8	0.190	48.5	42.7	828	388	18	<0.83	4.6	<2.19	3781
3rd Quarter	N1009055-01	91	48.0	0.380	64.0	51.0	500	410	23	<4.17	4.9	0.2	3401
4th Quarter	N1012079-01	150	68.0	0.340	110.3	61.0	1598	600	43	1.88	6.3	7.5	6000

**TABLE 3: LEE COUNTY SOLID WASTE RESOURCE RECOVERY FACILITY
2010 ASH RESIDUE ANALYSIS RESULTS FOR MERCURY (mg/Kg)**

Sampling Period	Sample ID	Sample Date	% Moisture Content	Dry-Ash Basis Mercury (mg/Kg)	"As Received" Basis Mercury (mg/Kg)
1st Quarter	N1003099-01	03/04/10	18.1	1.59	1.30
2nd Quarter	N1006073-1	06/07/10	20.4	0.21	0.17
3rd Quarter	N1009054	09/02/10	16.1	<0.01	<0.01
4th Quarter	N1012080	12/06/10	19.8	<0.01	<0.01

APPENDIX

FIRST QUARTER 2010

SANDERS LABORATORIES, INC.
Laboratory Test Report

Lab Project #: N1003099
Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Client Project Name: WTE Ash Belt Composite
Laboratory Contact: Jeff Walsh

Page 1 of _____
All subsequent pages are identified by: N1003099.
These pages may include, but are not limited to: Analytical Data, Chains of Custodys, Subcontracted Data and Case Narratives.

QUALIFIER DEFINITIONS

B: Results based upon colony counts outside the acceptable range.
I: The reported value is between the laboratory MDL and the laboratory PQL.
J3: The reported value failed to meet the established quality control criteria.
J4: The sample matrix interfered with the ability to make an accurate determination.
J5: The data is questionable because of improper lab or field protocols.
K: Off scale low, actual value is less than the value given.
L: Off scale high, actual value is known to be greater than the value given.
Q: Sample held beyond acceptable holding time.
U: The compound was analyzed for, but not detected.
V: The analyte was detected in both the sample and the associated method blank.
Y: The sample was unpreserved or improperly preserved.
Z: Too many colonies present (TNTC).
** This result does not meet NELAC standards.
HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

Sanders Laboratories follows DEP standard operating procedures for field sampling.

Laboratory PQL's are available upon request.

Reports are archived for a minimum of 5 years. Copies of reports which are less than 1 year old are available for a fee of \$25.00 per report. Reports older than 1 year are available for a fee of \$50.00 per report. Copies will be provided within 1 week of the time of the request.

Client Project: WTE Ash Belt Composite
Lab Project: N1003099
Report Date: 03/23/10



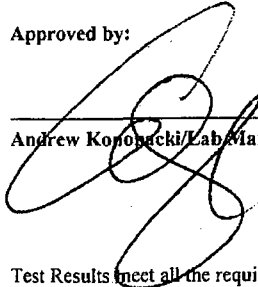
Laboratory Results

Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905

Lab ID	Sample Description	Matrix	Sample Type	Received Date/Time	Sample Date/Time
N1003099-01	4 Hr. Ash Belt Composite	Other	composite	3/5/10 11:00	3/4/10 13:10

Analysis	Method	Results	Qual	MDL	Units	AnalysisDate/Time	Analyst	Cert ID
Mercury, Total (solid)	EPA7470	1.59		0.07	mg/Kg dry	3/18/10 17:16	HBEL	E96080
Total Solids %	SM2540G	81.9		0.01	%	3/5/10 16:30	AS	E84380

Approved by:



Andrew Koponicki/Lab Manager Nokomis

Comments:

Test Results meet all the requirements of the NELAC standards.

ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 1.7.10 Start Time: 09²⁰ Finish Time: 13¹⁰
Field ID # ^W TE010710 Discarded Residue weight: 23 LBS Size: 5"-1.5" Type: Rock glass
Monthly Composite # 2 Date: 2.5.10 Start Time: 07²⁵ Finish Time: 11¹⁵ ^{METAL}
Field ID # WTE020510 Discarded Residue weight: 26 LBS Size: 5"-2" Type: Rock glass
Monthly Composite # 3 Date: 03.4.10 Start Time: 09²⁰ Finish Time: 13¹⁰ ^{METAL}
Field ID # WTE030410 Discarded Residue weight: 27 LBS Size: 5"-2" Type: Rock glass
Lab ID. For Hg sample N1003099 ^{METAL}

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place ¼ of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining ¾.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 03.05.10 Lab ID # N1003100

- Combine the three monthly composites, mix well.
- Discard ½ the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT #

NR1003099

Page 1 of 1

Report To: Mike Duff
 Bill To: _____
 P.O. # _____
 Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,
 H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Project Name: Ash Belt
 Project Location: FT. MYERS

Customer Type: FOR LAB USE ONLY
 Kit # _____
 REQUESTED DUE DATE: 3/15/10

Client COVANTA Energy
 Address: 10500 Buckingham Rd
FT. Myers, FL 33905
 Phone 234.337.2200 Fax _____

Sampled By (PRINT) HILARY CROOK
 Sampler Signature _____

Matrix	SAMPLE DESCRIPTION	DATE	TIME	TYPE	ID	PRESERVATIVES		ANALYSES REQUEST		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
						ST	SH	ST	SH					
	4 hr. Ash Belt Composite	3.4.10	13	C				ST	SH	3.5.10	11	Meag	3.5.10	1100

OKAY TO RUN AS IS:
 CLIENT INITIAL: _____
 SAMPLES ON ICE Yes No

SANDERS LABORATORIES, INC.
Laboratory Test Report

Lab Project #: N1003100
Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Client Project Name: WTE Ash Belt Composite
Laboratory Contact: Jeff Walsh

Page 1 of _____
All subsequent pages are identified by: N1003100 .
These pages may include, but are not limited to: Analytical Data, Chains of Custody, Subcontracted Data and Case Narratives.

QUALIFIER DEFINITIONS

B: Results based upon colony counts outside the acceptable range.
I: The reported value is between the laboratory MDL and the laboratory PQL.
J3: The reported value failed to meet the established quality control criteria.
J4: The sample matrix interfered with the ability to make an accurate determination.
J5: The data is questionable because of improper lab or field protocols.
K: Off scale low, actual value is less than the value given.
L: Off scale high, actual value is known to be greater than the value given.
Q: Sample held beyond acceptable holding time.
U: The compound was analyzed for, but not detected.
V: The analyte was detected in both the sample and the associated method blank.
Y: The sample was unpreserved or improperly preserved.
Z: Too many colonies present (TNTC).
** This result does not meet NELAC standards.
HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

Sanders Laboratories follows DEP standard operating procedures for field sampling.

Laboratory PQL's are available upon request.

Reports are archived for a minimum of 5 years. Copies of reports which are less than 1 year old are available for a fee of \$25.00 per report. Reports older than 1 year are available for a fee of \$50.00 per report. Copies will be provided within 1 week of the time of the request.

Client Project: WTE Ash Belt Composite
 Lab Project: N1003100
 Report Date: 03/23/10



Laboratory Results

Covanta Energy
 10500 Buckingham Rd.
 Suite 400
 Fort Myers, FL 33905

Lab ID	Sample Description	Matrix	Sample Type	Received Date/Time	Sample Date/Time
N1003100-01	1st Qrt. Ash Belt Composite	Other	composite	3/5/10 11:00	3/5/10 11:00

Analysis	Method	Results	Qual	MDL	Units	Analysis Date/Time	Analyst	Cert ID
Antimony	6010B	108		2.24	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Arsenic	6010B	61.0		1.74	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Beryllium	6010B	0.47	U	0.47	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Cadmium	6010B	69.6		0.34	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Chromium	6010B	69.6		0.85	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Copper	6010B	771		0.66	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Lead	6010B	2610		1.37	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Nickel	6010B	58.5		0.95	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Selenium	6010B	2.99	U	2.99	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Silver	6010B	4.23		0.47	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Thallium	6010B	7.96	U	7.96	mg/Kg dry	3/19/10 15:08	HBEL	E96080
Total Solids %	SM2540G	80.4		0.01	%	3/5/10 16:30	AS	E84380
Zinc	6010B	4480		47.3	mg/Kg dry	3/19/10 15:08	HBEL	E96080

Approved by:

Andrew Kohopacki Lab Manager Nokomis

Comments:

Test Results meet all the requirements of the NELAC standards.

ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 1.7.10 Start Time: 09²⁰ Finish Time: 13¹⁰
 Field ID # ^WTE010710 Discarded Residue weight: 23 LBS Size: 5"-1.5" Type: Rock glass
 Monthly Composite # 2 Date: 2.5.10 Start Time: 07²⁵ Finish Time: 11¹⁵ METAL
 Field ID # WTE020510 Discarded Residue weight: 26 LBS Size: 5"-2" Type: Rock glass
 Monthly Composite # 3 Date: 03.4.10 Start Time: 09²⁰ Finish Time: 13¹⁰ METAL
 Field ID # WTE030410 Discarded Residue weight: 24 LBS Size: 5"-2" Type: Rock glass
 Lab ID. For Hg sample N1003099 METAL

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place ¼ of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining ¾.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 03.05.10 Lab ID # N1003100

- Combine the three monthly composites, mix well.
- Discard ½ the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT # 11003100

Page 1 of 1

Report To: Mike DUFF

Client COVANTA Energy
 Address 10500 Buckingham Rd.
Ft. Myers, FL 33905
 Phone 239.337.2200 Fax _____

Project Name: Ash Belt
 Project Location: QRTZ composite
 Customer Type: _____
 Kit # FOR LAB USE ONLY
 REQUESTED DUE DATE: 3/15/10

Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,
 H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Sampled By (PRINT) Sampler Signature	SAMPLE DESCRIPTION	Sample		ANALYSES REQUEST	PRESERVATIVES	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		DATE	TYPE								
<u>HILARY CROOK</u>	<u>1st QRT. Ash Belt composite</u>	<u>3.5.10</u>	<u>C</u>	<u>1 1 1 1 1</u>							
	<u>1.7.10</u>										
	<u>2.5.10</u>										
	<u>3.4.10</u>										

Matrix	Sample ID #
	<u>-DIA</u>

Bottle Lot #	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
<u>C600401C</u>	<u>3.5.10</u>	<u>11:00</u>	<u>[Signature]</u>	<u>3/5/10</u>	<u>1100</u>

OKAY TO RUN AS IS...	CLIENT INITIAL:	SAMPLES ON ICE
<input checked="" type="checkbox"/>	<u>[Signature]</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

SECOND QUARTER 2010



Laboratory Test Report

Lab Project #: N1006073

Page 1 of 4

All subsequent pages are identified by: N1006073 .
These pages may include, but are not limited to: Analytical Data, Chains of Custodys, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: Ash Belt

QUALIFIER DEFINITIONS

- B: Results based-upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
 - K: Off scale low, actual value is known to be less than the value given.
 - L: Off scale high, actual value is known to be greater than the value given.
 - Q: Sample held beyond acceptable holding time.
 - U: The compound was analyzed for, but not detected.
 - V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.
 - Y: The laboratory analysis was from an improperly preserved sample.
 - Z: Too many colonies were present for accurate counting.
- HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Test results meet all the requirements of the NELAC standards, unless otherwise noted.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

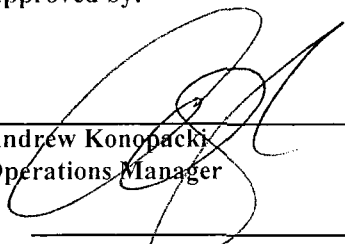
Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Laboratory PQL's are available upon request.

Reports are archived for a minimum of 5 years. Copies of reports which are less than 1 year old are available for a fee of \$25.00 per report. Reports older than 1 year are available for a fee of \$50.00 per report. Copies will be provided within 1 week of the time of the request.

Approved by:

Comments:



Andrew Konopacki
Operations Manager



ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 4.1.10 Start Time: 09³⁵ Finish Time: 13²⁵
 Field ID # WTE040110 Discarded Residue weight: 26 LBS Size: 5"-2" Type: Rock, METAL GLASS
 Monthly Composite # 2 Date: 5.6.10 Start Time: 09³⁰ Finish Time: 13³⁰
 Field ID # WTE050610 Discarded Residue weight: 27 LBS Size: 5"-2" Type: Rock, METAL GLASS
 Monthly Composite # 3 Date: 6.3.10 Start Time: 09³⁵ Finish Time: 13²⁵
 Field ID # WTE060310 Discarded Residue weight: 26 LBS Size: 5"-2" Type: Rock, METAL GLASS
 Lab ID. For Hg sample N1006073

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place ¼ of the composited, mixed and sieved ash sample into a large sample container. Lable with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining ¾.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 6.7.10 / 09³⁰ Lab ID # N1006074

- Combine the three monthly composites, mix well.
- Discard ½ the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Client Project: Ash Belt

Page: Page 1 of 1

Lab Project: N1006073

Report Date: 06/14/10

<u>Lab ID</u>	<u>Sample Description</u>		<u>Matrix</u>		<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>
N1006073-01	4 Hr. Composite Ash Belt		Other		composite	6/7/10 14:00	6/3/10 13:25

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Mercury, Total (solid)	0.21		0.02	0.09	mg/Kg dry	EPA7470	NB100614009	6/9/10 13:05	HBEL	E96080
Total Solids %	79.6		0.01	0.01	%	SM2540G	NB100608023	6/7/10 16:15	AS	E84380



CHAIN-OF-CUSTODY RECORD

PROJECT # N1006073

Page 1 of 1

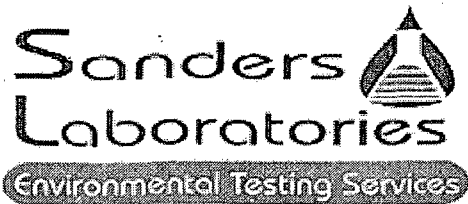
Client COVANTIA Energy
 Address 10500 Buckingham Rd.
FT. MYERS, FL 33905
 Phone _____ Fax _____

Report To: Mike Duff
 Bill To: _____
 P.O. # _____
 Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,
 H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Project Name: _____
 Project Location: Ash Belt
 Customer Type: _____
 Kit # _____
 REQUESTED DUE DATE: 6/15/10

Sampled By (PRINT)		Sample		ANALYSES REQUEST	PRESERVATIVES	DATE	TIME	DATE	TIME	ACCEPTED BY/AFFILIATION	DATE	TIME	
Sampler Signature	Hillary Crook	DATE	TIME										DATE
Matrix	SAMPLE DESCRIPTION	DATE	TIME	TYPE	ICE								Sample ID #
	<u>1 hr. Composite Ash Belt</u>	<u>6-5-10</u>	<u>13:35</u>	<u>C</u>						<u>6/7/10</u>	<u>1400</u>	<u>1400</u>	<u>-01A</u>
Bottle Lot #													
	COMMENTS:												

OKAY TO RUN AS IS...
 CLIENT INITIAL: _____
 SAMPLES ON ICE
 Yes No



Laboratory Test Report

Lab Project #: N1006074

Page 1 of 4

All subsequent pages are identified by: N1006074. These pages may include, but are not limited to: Analytical Data, Chains of Custody, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: WTE Ash Belt Composite

QUALIFIER DEFINITIONS

- B: Results based upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
 - K: Off scale low, actual value is known to be less than the value given.
 - L: Off scale high, actual value is known to be greater than the value given.
 - Q: Sample held beyond acceptable holding time.
 - U: The compound was analyzed for, but not detected.
 - V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.
 - Y: The laboratory analysis was from an improperly preserved sample.
 - Z: Too many colonies were present for accurate counting.
- HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Test results meet all the requirements of the NELAC standards, unless otherwise noted.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

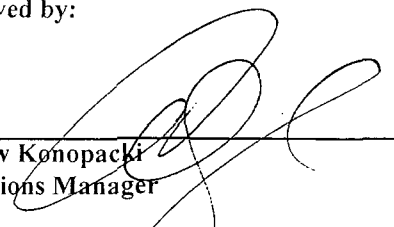
Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Laboratory PQL's are available upon request.

Reports are archived for a minimum of 5 years. Copies of reports which are less than 1 year old are available for a fee of \$25.00 per report. Reports older than 1 year are available for a fee of \$50.00 per report. Copies will be provided within 1 week of the time of the request.

Approved by:

Comments:



Andrew Konopacki
Operations Manager

Laboratory Test Report

Client: Covanta Energy

Page: Page 1 of 1

Client Project: WTE Ash Belt Composite

Lab Project: N1006074

Report Date: 06/28/10

<u>Lab ID</u>	<u>Sample Description</u>		<u>Matrix</u>	<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>				
N1006074-01	4 Hr. Comp		Other	composite	6/7/10 14:00	6/3/10 0:00				
<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Antimony	134		0.62	2.48	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Arsenic	48.7		0.46	1.85	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Beryllium	0.19	I	0.13	0.54	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Cadmium	60.9		0.09	0.36	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Chromium	53.6		0.23	0.93	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Copper	1040		1.83	7.31	mg/Kg dry	6010B	NB100628019	6/16/10 18:18	HBEL	E96080
Lead	487		0.39	1.56	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Nickel	23.1		0.26	1.02	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Selenium	0.83	U	0.83	3.31	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Silver	4.63		0.13	0.54	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Thallium	2.19	U	2.19	8.77	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080
Zinc	4750		134	536	mg/Kg dry	6010B	NB100628019	6/10/10 19:12	HBEL	E96080

ASH COMPOSITE WORKSHEET

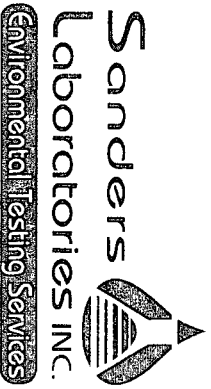
Monthly Composite # 1 Date: 4-1-10 Start Time: 09³⁵ Finish Time: 13³⁵
 Field ID # WTE040110 Discarded Residue weight: 26 LBS Size: 5" - 2" Type: Rock, METAL, GLASS
 Monthly Composite # 2 Date: 5-6-10 Start Time: 09³⁰ Finish Time: 13³⁰
 Field ID # WTE050610 Discarded Residue weight: 27 LBS Size: 5" - 2" Type: Rock, METAL, GLASS
 Monthly Composite # 3 Date: 6-3-10 Start Time: 09³⁵ Finish Time: 13²⁵
 Field ID # WTE060310 Discarded Residue weight: 26 LBS Size: 5" - 2" Type: Rock, METAL, GLASS
 Lab ID. For Hg sample N1006073

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place 1/4 of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining 3/4.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite
 Date & Time Composite Prepared 6-7-10 / 09³⁰ Lab ID # N1006074

- Combine the three monthly composites, mix well.
- Discard 1/2 the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT # N10060744

Page 1 of 1

Client COVANTA

Address 10500 Buckingham Rd.

FT. MYERS, FLORIDA 33905

Phone 239.337.2200 Fax _____

Report To: MIKE DUFF

Bill To: _____

P.O. # _____

Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,
H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Project Name: ART. COMPOSITE

Project Location: ASH BELT

Customer Type: _____

Kit # _____

REQUESTED DUE DATE: 6/15/10

Sampled By (PRINT) HILARY CROOK

Sampler Signature _____

Matrix	SAMPLE DESCRIPTION	DATE	TIME	TYPE	pH	ICE	PRESERVATIVES	ANALYSES REQUEST	Sample ID #
	<u>4.1.10 4 hr. comp. 9³⁵-13³⁵</u>	<u>4.1.10</u>		<u>C</u>				<u>As, Sb, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, TL, Zn</u>	<u>-01A</u>
	<u>5.6.10 4 hr. comp. 9³⁰-13³⁰</u>	<u>5.6.10</u>		<u>C</u>					
	<u>6.3.10 4 hr comp 9³⁵-13³⁵</u>	<u>6.3.10</u>		<u>C</u>					

THIRD QUARTER 2010



Laboratory Test Report

Lab Project #: N1009054

Page 1 of 4

All subsequent pages are identified by: N1009054. These pages may include, but are not limited to: Analytical Data, Chains of Custody, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: Ash Belt

QUALIFIER DEFINITIONS

- B: Results based upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
 - K: Off scale low, actual value is known to be less than the value given.
 - L: Off scale high, actual value is known to be greater than the value given.
 - Q: Sample held beyond acceptable holding time.
 - U: The compound was analyzed for, but not detected.
 - V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.
 - Y: The laboratory analysis was from an improperly preserved sample.
 - Z: Too many colonies were present for accurate counting.
- HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

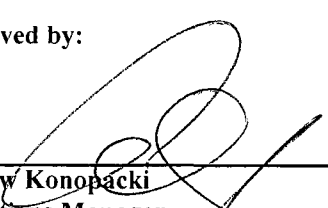
Test results meet all the requirements of the NELAC standards, unless otherwise noted.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Laboratory PQL's are available upon request.

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Approved by:


Andrew Konopacki
Operations Manager

Comments:

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Client Project: Ash Belt

Page: Page 1 of 1

Lab Project: N1009054

Report Date: 09/23/10

<u>Lab ID</u>	<u>Sample Description</u>		<u>Matrix</u>	<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>				
N1009054-01	4 Hr. Ash Composite		Other	composite	9/7/10 10:00	9/2/10 13:50				
<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Mercury, Total (solid)	0.01	U	0.01	0.03	mg/Kg dry	EPA7470	NB100923044	9/21/10 13:25	HBEL	E96080
pH (solid)	11.64	Q	0.01	0.01	std units	EPA9045	NB100910002	9/9/10 13:10	AS	E84380
Total Solids %	83.9		0.01	0.01	%	SM2540G	NB100909029	9/7/10 16:00	AS	E84380



ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 7.1.10 Start Time: 08²⁰ Finish Time: 12¹⁰
 Field ID # WTE070110 Discarded Residue weight: 23 LBS Size: .5"-2" Type: Rock glass METAL
 Monthly Composite # 2 Date: 8.5.10 Start Time: 09³⁰ Finish Time: 13²⁰
 Field ID # WTE080510 Discarded Residue weight: 25 LBS Size: .5"-2" Type: Rock glass METAL
 Monthly Composite # 3 Date: 9.2.10 Start Time: 10⁰⁰ Finish Time: 13⁵⁰
 Field ID # WTE090210 Discarded Residue weight: 28 LBS Size: .5"-2" Type: Rock glass METAL
 Lab ID. For Hg sample N1009054

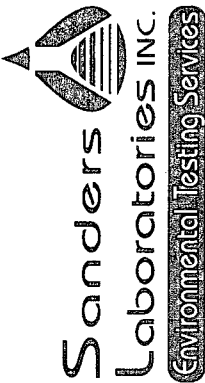
- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place 1/4 of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining 3/4.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 9.7.10 09⁰⁰ Lab ID # N1009055

- Combine the three monthly composites, mix well.
- Discard 1/2 the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT #

W1009054

Page

of 1

Project Name: Ash Belt
 Project Location: FT. Myers
 Customer Type: FOR LAB USE ONLY
 Kit # 9-15-10
 REQUESTED DUE DATE: 9-15-10

Report To: Mike Duff
 Bill To: _____
 P.O. # _____
 Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,
 H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Client: COVANTA Energy
 Address: 10500 Buckingham Rd.
FT. MYERS, FL 33905
 Phone _____ Fax _____

Sampled By (PRINT) Sampler Signature		Sample		PRESERVATIVES		ANALYSES REQUEST		RELIQUISHED BY/AFFILIATION		DATE	TIME	DATE	TIME						
Matrix	SAMPLE DESCRIPTION	DATE	TIME	TYPE	H	ICE	PH	PH	TS	FB	TS	FB	TS	FB	TS	FB	TS	Sample ID #	
	<u>4 hr Ash composite</u>	<u>7-2-10</u>	<u>1350</u>															<u>1A</u>	
9-086506												<u>7-2-10</u>	<u>10⁰⁰</u>					<u>9710</u>	<u>1000</u>
COMMENTS:																			
OKAY TO RUN AS IS:																			
CLIENT INITIAL:																			
SAMPLES ON ICE																			
Yes No																			



Laboratory Test Report

Lab Project #: N1009055

Page 1 of 4

All subsequent pages are identified by: N1009055. These pages may include, but are not limited to: Analytical Data, Chains of Custody, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: WTE Ash Belt Composite

QUALIFIER DEFINITIONS

- B: Results based upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
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 - Y: The laboratory analysis was from an improperly preserved sample.
 - Z: Too many colonies were present for accurate counting.
- HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Test results meet all the requirements of the NELAC standards, unless otherwise noted.

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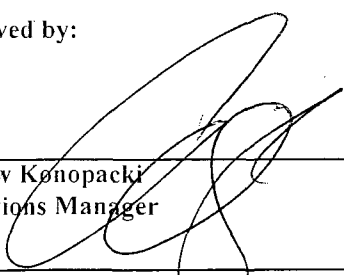
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Approved by:

Comments:



Andrew Konopacki
Operations Manager

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Page: Page 1 of 1

Client Project: WTE Ash Belt Composite

Lab Project: N1009055

Report Date: 09/24/10

<u>Lab ID</u>	<u>Sample Description</u>				<u>Matrix</u>	<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>		
N1009055-01	4 Hr. Ash Composite/3rd Qrt. Comp				Other	composite	9/7/10 10:00	9/2/10 13:50		
<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Antimony	115		1.01	4.05	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Arsenic	60.7		0.76	3.03	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Beryllium	0.38	I	0.21	0.86	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Cadmium	80.9		0.15	0.61	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Chromium	64.5		0.38	1.52	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Copper	632		0.29	1.16	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Lead	518		0.63	2.53	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Nickel	29.1		0.42	1.67	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Selenium	4.17	U	4.17	16.7	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Silver	6.19		0.21	0.86	mg/Kg dry	6010B	NB100924006	9/20/10 12:51	HBEL	E96080
Thallium	0.16	I	0.15	0.61	mg/Kg dry	6010B	NB100924006	9/23/10 17:46	HBEL	E96080
Total Solids %	79.1		0.01	0.01	%	SM2540G	NB100909029	9/7/10 16:00	AS	E84380
Zinc	4300		105	420	mg/Kg dry	6010B	NB100924006	9/20/10 16:45	HBEL	E96080

ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 7.1.10 Start Time: 08²⁰ Finish Time: 12¹⁰
 Field ID # WTE070110 Discarded Residue weight: 23 LBS Size: 5"-2" Type: Rock glass
 Monthly Composite # 2 Date: 8.5.10 Start Time: 09³⁰ Finish Time: 13²⁰
 Field ID # WTE080510 Discarded Residue weight: 25 LBS Size: 5"-2" Type: Rock glass
 Monthly Composite # 3 Date: 9.2.10 Start Time: 10⁰⁰ Finish Time: 13⁵⁰
 Field ID # WTE090210 Discarded Residue weight: 28 LBS Size: 5"-2" Type: Rock glass
 Lab ID. For Hg sample N1009054

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place ¼ of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining ¾.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 9.7.10 09⁰⁰ Lab ID # N1009055

- Combine the three-monthly composites, mix well.
- Discard ½ the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT #

N1609055

Page

of 1

Report To: Mike Duff

Bill To: _____

P.O. # _____

Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST, H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Project Name: Ash Belt Camp

Project Location: FT. MYERS

Customer Type: _____

Kit # FOR LAB USE ONLY

REQUESTED DUE DATE: 9-15-10

Client COVANTA Energy

Address 10500 Buckingham Rd.

FT. MYERS, FL 33905

Phone _____ Fax _____

Sampled By (PRINT) <u>SMALWA ODEGARD</u> Sampler Signature		Sample		PRESERVATIVES		ANALYSES REQUEST		REINQUISHED BY/AFFILIATION		DATE	TIME	SAMPLE ID #
Matrix	SAMPLE DESCRIPTION	DATE	TIME	H	OH	TS	TS	DATE	TIME	DATE	TIME	
	<u>4 hr Ash composite</u>	<u>7.1.10</u>	<u>8:20 - 12:10</u>									<u>1A</u>
	<u>4 hr Ash composite</u>	<u>8.5.10</u>	<u>9:30 - 13:20</u>									
	<u>4 hr Ash composite</u>	<u>9.2.10</u>	<u>10:00 - 13:50</u>									
	<u>3RD QRT. COMP</u>											

<u>9-21-10</u>	<u>OKAY TO RUN AS IS...</u>	<u>9.7.10</u>	<u>10:00</u>	<u>97 Energy</u>	<u>9-7-10</u>	<u>10:00</u>
COMMENTS:						
<u>gds</u>						
CLIENT INITIAL: _____						
SAMPLES ON ICE <input checked="" type="radio"/> Yes <input type="radio"/> No						

FOURTH QUARTER 2010



Laboratory Test Report

Lab Project #: N1012080

Page 1 of 4

All subsequent pages are identified by: N1012080. These pages may include, but are not limited to: Analytical Data, Chains of Custodys, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: Ash Belt

QUALIFIER DEFINITIONS

- B: Results based upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
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 - L: Off scale high, actual value is known to be greater than the value given.
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A statement of estimated uncertainty of results is available upon request.

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Test results meet all the requirements of the NELAC standards, unless otherwise noted.

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Approved by:

Comments:

Andrew Konopacki
Operations Manager

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Client Project: Ash Belt

Page: Page 1 of 1

Lab Project: N1012080

Report Date: 12/23/10

<u>Lab ID</u>	<u>Sample Description</u>	<u>Matrix</u>	<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>
N1012080-01	12-2-10 4 Hr Comp.	Other	grab	12/6/10 12:40	12/2/10 13:15

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Mercury, Total (solid)	0.01	U	0.01	0.04	mg/Kg dry	EPA7470	NB101221057	12/17/10 17:20	HBEL	E96080
pH (solid)	11.9	Q	0.01	0.01	std units	EPA9045	NB101207033	12/7/10 12:30	AS	E84380
Total Solids %	80.2		0.01	0.01	%	SM2540G	NB101213004	12/7/10 16:20	AS/SE	E84380

ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 10-7-10 Start Time: 09⁴⁵ Finish Time: 13³⁵
 Field ID # WTE100710 Discarded Residue weight: 31 LBS Size: 5" to 11" Type: ROCK GLASS METAL
 Monthly Composite # 2 Date: 11-4-10 Start Time: 1030 Finish Time: 1420
 Field ID # WTE110410 Discarded Residue weight: 32 LBS Size: 5" to 2" Type: Rock, Glass, metal
 Monthly Composite # 3 Date: 12-2-10 Start Time: 0925 Finish Time: 1315
 Field ID # WTE120210 Discarded Residue weight: 24 LBS Size: 5/8" to 2" Type: Rock, Glass, metal
 Lab ID. For Hg sample N1012080

- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place 1/4 of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining 3/4.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 12-10-10 Lab ID # N1012079
1130

- Combine the three monthly composites, mix well.
- Discard 1/2 the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT #

11012080

Page _____ of _____

Report To: Mike Duff

Project Name: ASH BELT

Bill To: same

Project Location: FT. MYERS

P.O. # _____

Customer Type: _____

Preservative: HCl = H, HNO₃ = N, Na₂S₂O₃ = ST,

H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Kit # 100-100-100-100

REQUESTED DUE DATE: 12/14/10

Client COVANTA ENERGY

Address 10500 Buckingham Rd

FT. MYERS, FL 33905

Phone _____ Fax _____

Sampled By (PRINT) Hilary Crook

Matrix	SAMPLE DESCRIPTION	DATE		TYPE	Sample ID #	ANALYSES REQUEST	PRESERVATIVES		RELINQUISHED BY/AFFILIATION		DATE		TIME	
		TIME	TIME				DATE	TIME	DATE	TIME	DATE	TIME		
	<u>12.2.10 4 hr comp.</u>	<u>12.2.10</u>	<u>13N</u>	<u>G</u>	<u>-01A</u>					<u>12.6.10</u>	<u>12:40</u>	<u>12/6/10</u>	<u>12:40</u>	

4036-000

OKAY TO RUN AS IS:

CLIENT INITIAL: _____

SAMPLES ON ICE: Yes No



Laboratory Test Report

Lab Project #: N1012079

Page 1 of 4

All subsequent pages are identified by: N1012079. These pages may include, but are not limited to: Analytical Data, Chains of Custody, Subcontracted Data and Case Narratives.

Questions regarding this report should be directed to your **Laboratory Contact:**

Jeff Walsh

Client: Covanta Energy
10500 Buckingham Rd.
Suite 400
Fort Myers, FL 33905
Phone: 1-239-337-2200
Fax: 1-239-337-2510
E-mail:
Project Name: Ash Belt

QUALIFIER DEFINITIONS

- B: Results based upon colony counts outside the acceptable range.
 - I: The reported value is greater than or equal to the laboratory MDL but less than the laboratory PQL.
 - J: Estimated Value.
 - J7: Excessive amounts of Sodium Sulfite used to dechlorinate the sample due to high levels of chlorine present.
 - K: Off scale low, actual value is known to be less than the value given.
 - L: Off scale high, actual value is known to be greater than the value given.
 - Q: Sample held beyond acceptable holding time.
 - U: The compound was analyzed for, but not detected.
 - V: Indicates that the analyte was detected at or above the MDL in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.
 - Y: The laboratory analysis was from an improperly preserved sample.
 - Z: Too many colonies were present for accurate counting.
- HACH results may not meet NELAC standards.

A statement of estimated uncertainty of results is available upon request.

Analytical results provided relate only to the samples received for this project.

Test results meet all the requirements of the NELAC standards, unless otherwise noted.

Laboratory report shall not be reproduced except in full, without the written approval of Sanders Laboratories.

Sanders Laboratories follows DEP standard operating procedures for field sampling, unless otherwise noted.

Laboratory PQL's are available upon request.

Reports are archived for a minimum of 5 years. Copies of reports which are less than 1 year old are available for a fee of \$25.00 per report. Reports older than 1 year are available for a fee of \$50.00 per report. Copies will be provided within 1 week of the time of the request.

Approved by:

Comments:



Andrew Konopacki
Operations Manager

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Client Project: Ash Belt

Page: Page 1 of 1

Lab Project: N1012079

Report Date: 01/03/11

<u>Lab ID</u>	<u>Sample Description</u>		<u>Matrix</u>	<u>Sample Type</u>	<u>Received Date/Time</u>	<u>Sample Date/Time</u>
N1012079-01	4th Qrt. Comp. Sample		Other	composite	12/6/10 12:40	12/6/10 11:30

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	<u>Method</u>	<u>Batch #</u>	<u>Analysis Date/Time</u>	<u>Analyst</u>	<u>Lab ID</u>
Antimony	188		0.86	3.45	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Arsenic	85.1		0.64	2.55	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Beryllium	0.34	I	0.18	0.70	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Cadmium	138		0.13	0.50	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Chromium	76.4		0.33	1.30	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Copper	2000		2.50	10.0	mg/Kg dry	6010B	NB101230015	12/23/10 16:51	HBEL	E96080
Lead	751		5.38	21.5	mg/Kg dry	6010B	NB101230015	12/23/10 16:51	HBEL	E96080
Nickel	53.8		0.36	1.45	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Selenium	1.88	I	1.14	4.56	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Silver	7.88		0.18	0.70	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Thallium	7.51	I	3.00	12.0	mg/Kg dry	6010B	NB101230015	12/23/10 13:48	HBEL	E96080
Total Solids %	79.9		0.01	0.01	%	SM2540G	NB101213004	12/7/10 16:20	AS/SE	E84380
Zinc	7510		3.00	12.0	mg/Kg dry	6010B	NB101230015	12/23/10 16:51	HBEL	E96080



ASH COMPOSITE WORKSHEET

Monthly Composite # 1 Date: 10-7-10 Start Time: 09⁴⁵ Finish Time: 13³⁵
 Field ID # WTE100710 Discarded Residue weight: 31 LBS Size: 5" to 11" Type: ROCK GLASS METAL

Monthly Composite # 2 Date: 11-4-10 Start Time: 1030 Finish Time: 1420
 Field ID # WTE110410 Discarded Residue weight: 32 LBS Size: 5" to 2" Type: Rock, Glass, Metal

Monthly Composite # 3 Date: 12-2-10 Start Time: 0925 Finish Time: 1315
 Field ID # WTE120210 Discarded Residue weight: 24 LBS Size: 5" to 2" Type: Rock, Glass, metal

Lab ID. For Hg sample N1012080

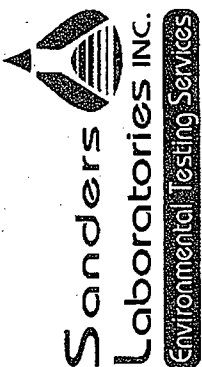
- Collect ash samples of approximately 1-lb @ 10 minute intervals over a 4 hour period.
- The sample will be stored in a covered pre-cleaned plastic bucket during sampling.
- Mix the composite sample well with a pre-cleaned spoon or spatula, and then pass through a 3/8" sieve. Non- crushable residue is weighed and discarded.
- Place 1/4 of the composited, mixed and sieved ash sample into a large sample container. Label with the following information: Field ID. #, sample location, date and time of sampling, collectors name and analyses to be performed (As, Sb, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag , Tl, Zn). Discard the remaining 3/4.

Note: Before adding the third monthly composite to the 2 previous monthly composites, aliquot a portion for Mercury analyses. Assign this a separate sample number.

Quarterly Composite

Date & Time Composite Prepared 12-6-10 Lab ID # N1012079
11:30

- Combine the three monthly composites, mix well.
- Discard 1/2 the mixture. Divide the remaining composite into two equal portions. Archive one portion for possible future testing. The other portion will be analyzed for the Priority Pollutant Metals listed above.



CHAIN-OF-CUSTODY RECORD

PROJECT # 110120791X

Page 1 of 1

Report To: Mike Duff
 Bill To: Same
 P.O. # _____

Project Name: Ash Belt
 Project Location: FT. MYERS
 Customer Type: FOR LAB USE ONLY

Preservative: HCl = H, HNO₃ = N, Na₂S₂O₈ = ST,
 H₂SO₄ = S, NaOH = SH, NH₄Cl = NH

Kit # _____
 REQUESTED DUE DATE: 12/14/10

Client: COVANTA Energy
 Address: 10500 Buckingham Rd
FT. MYERS, FL 33905
 Phone _____ Fax _____

Sampled By (PRINT): HILARY CROOK
 Sampler Signature: _____
 Sample Description: 2 sample 10-10

DATE	TIME	TYPE
<u>12-7-10</u>	<u>11-30</u>	<u>C</u>
<u>10-7-10</u>	<u>Ash Belt</u>	
<u>11-4-10</u>		
<u>12-2-10</u>	<u>↓</u>	

Matrix	PREPARED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample ID #
	DATE	TIME						

9-10-26-1006

OKAY TO RUN AS IS: Yes

CLIENT INITIAL: _____

SAMPLES ON ICE: Yes No

COMMENTS: _____

RELINQUISHED BY / AFFILIATION: [Signature]

DATE: 12-6-10 TIME: 12

ACCEPTED BY / AFFILIATION: [Signature]

DATE: 12-6-10 TIME: 12:40