

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

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 PECH ATORY

Florida Department of Environmental Protection

REGULATORY AGENCIES:

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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A Quarterly Laboratory Reports for 2010

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 <u>LABORATORY INFORMATION</u>

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:

As received =

Dry Weight

Dry Ash Sample Weight

(mg/Kg)

Concentration (mg/Kg)

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.

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

Antimony (mg/Kg)	Arsenic (mg/Kg)	Sampling Antimony Arsenic Beryllium Cadmium (Period (m9/Kg) (m9/Kg) (m9/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Copper (mg/Kg)	Lead	Nickel (mø/Kø)	Lead Nickel Selenium Silver Thallium (mg/Kg) (mg/Kg) (mg/Kg)	Silver (mø/Kø)		Zinc (mo/Ko)	Moisture Content
1	61.0	<0.47	9.69	9.69	771	2,610	58.5	<2.99	4.23		4,480	19.6
	48.7	. 0.19	6.09	53.6	1,040	487	23.1	<0.83	4.63	<2.19	4,750	20.4
	60.7	0.38	80.9	64.5	632	518	29.1	<4.17	6.19	0.16	4,300	20.9
	85.1	0.34	138	76.4	2,000	751	53.8	1.88	7.88	7.51	7,510	20.1

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

Zinc (mg/Kg)	3603	3781	3401	0009
m Z (m;			Ċ.	9
Thallium Zinc (mg/Kg) (mg/Kg)	<7.96	<2.19	0.2	7.5
Silver (mg/Kg)	3.4	4.6	4.9	6.3
Lead Nickel Selenium (mg/Kg) (mg/Kg)	<2.99	<0.83	<4.17	1.88
Nickel (mg/Kg)	47	81	23	43
Lead (mg/Kg) (2099	388	410	009
Copper (mg/Kg)	620	828	200	1598
Chromiu m (mg/Kg)	26.0	42.7	51.0	61.0
Cadmium (mg/Kg)	26.0	48.5	64.0	110.3
Antimony Arsenic Beryllium Cadmium (mg/Kg) (mg/Kg) (mg/Kg)	<0.47	0.190	0.380	0.340
Arsenic (mg/Kg)	49.1	38.8	48.0	0.89
Antimony (mg/Kg)	. 81	106.7	91	150
Antimony Arsenic Be Sample ID (mg/Kg) (mg/Kg) (r	N0903297-01	N1006074-01	N1009055-01	N1012079-01
Sampling Period	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter

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

Sampling Period	Sample ID	Sample ID Sample Date	% Moisture Content	Dry-Ash Basis Mercury (mg/Kg)	"As Recieved" 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.

Nokomis Lab ~ 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-6774 ~ HRS Certification # E84380 Fort Myers Lab ~ 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457

Page: Page 1 of 1

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 Sa	mple Descrip	ion		Matrix	Sample Type	Received Date/T	ime San	iple Date/Tir	ne
	r. Ash Belt Comp		Marian de la constitución de la	Other	composite	3/5/10 11:00		3/4/10 13:10	
<u>Analysis</u>	<u>Method</u>	Results	Qual	<u>MDL</u>	<u>Units</u>	AnalysisDate/Time	<u>Analyst</u>	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:

Comments:

Andrew Konopacki/Lab/Vlanager Nokomis

Test Results meet all the requirements of the NELAC standards.



ASH COMPOSITE WORKSHEET

Monthly Composite # 1

Date: 1-1-10 Start Time: 09 Tinish Time: 13 10

Field ID # TEDIO 710

Discarded Residue weight: 23275 Size: 5"-1.5 Type: Rock glass

Monthly Composite # 2

Date: 2-5-10 Start Time: 07 25 Finish Time: 11 15

Field ID # WTE 0 20510

Discarded Residue weight: 26 11 25 Type: Rock glass

Monthly Composite # 3

Date: 03-4-10 Start Time: 09 20 Finish Time: 1310

Field ID # WTE 0 3 0 9 10

Discarded Residue weight: 29 11 5 Type: Rock glass

Field ID # WTE 0 3 0 9 10

Discarded Residue weight: 29 11 5 Type: Rock glass

Lab ID. For Hg sample N 100 30 9 100

- 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 03.05.10 Lab ID # N100 3100

- 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	PHOJECT NEW COSTOS
Sanders		Pageof
Caboratories INC.		Project Name: ASh M. OLT
	Report To: Wijke VUTI	project location.
Client COVANTA ENERGY	Bill To:	Customer Type:
Address 10500 Buckwaham Rd	# Od	**************************************
FT. Muppy FL 33905	Preservative: HCl = H, HNO3 = N, Nac3co3 = C1,	BEOLIESTED DUE DATE:
7 2 6. 227. 721M Fax		
Phone 21 21 Ans	PRESERVATIVES	

FT. WYLLAY

WH0080999

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	ample	200TC 3.4.10 13 C		BENNOUISHED	OKAN TO RUM	TIAL: SAMPLES ON ICE Yes No
Sampled By (PRINT)	Sampler Signature SAMIPLE DESCRIPTION	4 hr. Ash BeIT composite		Boille Lot	COMMENTS:	3 2

1050 Endeavor Ct., Nokomis, FL 34275-3623 • (941)488-8103 • FAX 484-6774

10090 Bavaria Rd., Fort Myers, Fl 33913 • (239) 590-0337 • FAX (239) 590-0536

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

QUALIFIER DEFINITIONS

B: Results based upon colony counts outside the acceptable range.

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- 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.

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

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Page: Page 1 of 1

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 Descrip	ion		Matrix	Sample Type	Received Date/I	ime San	ple Date/Time
N1003100-01	1st Qrt. Ash Belt Cor	nposite		Other	composite	3/5/10 11:00	AN ALAMA PICTORITY	3/5/10 11:00
<u>Analysis</u>	Method	Results	Qual	MDL	<u>Units</u>	AnalysisDate/Time	<u>Analyst</u>	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	Ü	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	Ū	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:

Comments:

Andrew Konopacki Cab Manager Nokomis

Test Results meet all the requirements of the NELAC standards.



ASH COMPOSITE WORKSHEET

Monthly Composite # 1

Date: 1.7.10 Start Time: 09 10 Finish Time: 13 10

Field ID # TEO10710

Discarded Residue weight: 232134 Size: 5 1.5 Type: Rock 9 1945

Monthly Composite # 2

Date: 2.5.10 Start Time: 07 25 Finish Time: 11 15

Field ID # WTE 0 20510

Discarded Residue weight: 26 1134 Size: 5 2 Type: Rock 9 1945

Monthly Composite # 3

Date: 03.410 Start Time: 0920 Finish Time: 1310

Field ID # WTE 0 30410

Discarded Residue weight: 24 1134 Size: 5 2 Type: Rock 9 1945

Lab ID. For Hg sample N 1003099

- 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 03.05.10 Lab ID # N 100 3100

- 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.

J 17

CHAIN-OF-CUSTODY RECORD

16-16-09-1000 V	Page of
PROJECT #	

Project Name: 145h 192LT Project Location: QRTLY COMPORE

Customer Type:_

축 #

REQUESTED DUE DATE:

	Report To
Client COVANTA ENERGY	Bill To:
Address 10500 Buckingham Rof.	P.O. #
F. MURRSFL 33905	Preservati
Phone 239. 337, 2260 Fax	

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Sampler	Sampler Signature		Sample	<u>\$}</u>			EX.	173 275	Town the state of			\	
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	COMMENTS:	OKAY TO BUN AS IS			1			,					
		CLIENT								5			;

1050 Endeavor Ct., Nokomis, FL 34275-3623 • (941)488-8103 • FAX 484-6774

SAMPLES ON ICE Yes (No

10090 Bavaria Rd., Fort Myers, FL 33913 • (239) 590-0337 • FRX (239) 590-0536

SECOND QUARTER 2010



Client:

Covanta Energy

10500 Buckingham Rd.

Suite 400

Fort Myers, FL 33905

Phone: Fax:

1-239-337-2200 1-239-337-2510

E-mail:

Project Name:

Ash Belt

Laboratory Test Report

Lab Project #: N1006073

Page 1 of

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

OUALIFIER 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.

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Approved by:

Comments:

Andrew Kongoacki Operations Manager

> Nokomis Lab > 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-6774 ~ HRS Certification # E84380 Fort Myers Lab ~ 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457



ASH COMPOSITE WORKSHEET

Monthly Composite # 1	Date: $4.1.10$ Start Time: 09^{35} Finish Time: 13^{25}
Field ID #WTFOYOIIO	Discarded Residue weight: 26 435 Size: 5"-2" Type: Rock, glass
Monthly Composite # 2	Date: 5.6.10 Start Time: 09 30 Finish Time: 13 30
Field ID # <u>WTE 0504</u> 10	Discarded Residue weight: 21 285 Size: 5" - 2" Type: Rock, meTAL Date: 6.3.10 Start Time: 0935 Finish Time: 1325 9LASS
Monthly Composite # 3	Date: 6.3.10 Start Time: 0935 Finish Time: 1325
Field ID # <u>WTE 060310</u>	Discarded Residue weight: 26 LB Size: 3-2" Type: Rod TWETA
	Lab ID. For Hg sample <u>N1006073</u>

- 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.

Date & Time Composite Prepared 6.2.10 2 Lab ID # N 100 60 74

- 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

N1006073-01

Client Project: Ash Belt

4 Hr. Composite Ash Belt

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Lab Project: N1006073

Report Date: 06/14/10

	i	
	*	
Lab ID Sample Description Matrix	Sample Type Received	l Date/Time Sample Date/Time
<u>Lab ID</u> <u>Sample Description</u> <u>Matrix</u>	Sample Type Received	Date/Time Sample Date/Time

composite

<u>Parameter</u>	Result	Qual	MDL	PQL	<u>Units</u>	Method	Batch #	Analysis Date/Time	<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 %	70.6		. 0.01	0.01	0/2	SM2540G	NB100608023	6/7/10 16:15	AS	E84380

CHAIN-OF-CUSTODY RECORD

10000000000000000000000000000000000000	3
PROJECT #	

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	网	, \ \
Erkain	Wa hAM	33904
415	Buck	7
COVA	10500	Myers
Client	Address	在

Fax

Phone

P.O. #

Report To: Mile Duff Bill To:

	A5h		
Project Name:	Project Location:_	Customer Type:	# ±.74

1	Т,	I
P.O. #	Preservative: $HCI = H$, $HNO_3 = N$, $Na_2S_2O_3 = ST$,	H ₂ SO ₄ = S, NaOH = SH, NH ₄ CI = NH

Phone Fax	12004 = 0, 10807 = 07, 101301 = 107	REQUESTED DUE DATE: $6/16$	2/10
Sampled By (PRINT)	PRESERVATIVES ANALYSES		
Sampler Signature	NEGUES! X		

\	_	Sample :	0/A				4	河子 河瓜	11/10 1/400				
			T					EUVA NOINATE					
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		T NPE TE E	ひ					REUNQUISHED BY / AFFILIATION	J.				
	Sample	\$10 July 96 97 Mg	6.5.10 9.35					I SELINOVII	977				
ROOK	inviser ive stelland		9							OKAN TO RUN ASIS	CLIENT INITIAL:	SAMPLES ON ICE	Yes (No)
Hell way	. ·	SAMPLE DESCRIPTION	. Composite	Bett	-				ir-	COMMENTS			
	Sampler Signature	Matrix	2	1456				डाठामां प्राप्त म					,



Client:

Covanta Energy

10500 Buckingham Rd.

Suite 400

Fort Myers, FL 33905

Phone: Fax:

1-239-337-2200 1-239-337-2510

E-mail:

Project Name:

WTE Ash Belt Composite

Laboratory Test Report

Lab Project #: N1006074

Page 1 of

All subsequent pages are identified by: N1006074. 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

QUALIFIER DEFINITIONS

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- 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.

Comments:

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:

Andrew Konopacki

Operations Manager

Nokomis Lab / 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-67,74 ~ HRS Certification # E84380 Fort Myers Lab ~ 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457

SANDERS LABORATORIES, INC.

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> N1006074-01	Sample Descri 4 Hr. Comp	<u>iption</u>		<u>N</u>	latrix Other	Sample Tyj composite		<u>®Date/Time</u> Sa 0 14:00	mple Date 6/3/10 0:0	
<u>Parameter</u>	Result	<u>Qual</u>	MDL	<u>PQL</u>	<u>Units</u>	Method	Batch #	<u>Analysis</u> <u>Date/Time</u>	Analyst	<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: 09^{35} Finish Time: 13^{25}
Field ID #WTFOYCHO	Discarded Residue weight: 26 LBS Size: 5 - 2 Type: Rock, glass
Monthly Composite # 2	Date: 5.6.10 Start Time: 09.30 Finish Time: 13.30
Field ID # <u>WTE 050</u> 410	Discarded Residue weight: 21 295 Size: 3 - 2 Type: Rock, meTAL Date: 6-3-10 Start Time: 09 35 Finish Time: 13 25
Monthly Composite # 3	Date: 6.3.10 Start Time: 09.35 Finish Time: 13.25
Field ID # <u>WTE 0603</u> 10	Discarded Residue weight: 26 45 Size: 5-2 Type: Rock WETAL
	Lab ID. For Hg sample <u>N 1006073</u>

- 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.

Date & Time Composite Prepared 6-210 29 Lab ID # N 100160 74

- 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.

۲.

Loborotories inc.)
-------------------	--	---

Client _

COVANTA

Bill To: P.O. #

Report To:

Address 10500 Buckingham

FT. Myers FLORIDA

33905

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

 $H_2SO_4 = S$, NaOH = SH, NH₄CI = NH

CHAIN-OF-CUSTODY RECORD

PROJECT WYOOGGTWY

	Kit# 572 AF 1870	Customer Type:	Project Location: 1454 15ct	Project Name: QKT, COM	Page
6/17/10	129091		Bett	COMIDOSITE	ge of

rescino	` — T	CLIENT INITIAL:	COMMENTS: QKANTIO AUN		Bottle Lot			42	6.3.10 4 hr comp 935 1325 6.3.10	5.6.10 Upr. comp. 930 1330 5	4.1.10 4 hr. comp. 935 1355 4	Matir SAMPLE DESCRIPTION	Sampler Signature	Sampled By (PRINT) HILARY CROOK	Phone 339.337. 22vo Fax
				nalls 6-1	RELINOUSHEED///AETHANION DA			2.	6-3-10	(C)	2140	DAVIS VIME TVARS OF CE	Sample	PRESERVATIVES ANA	$H_2SO_4 = S$, NaOH = SH, NH ₄ Cl = NH
				6-7-10 14 (Meader	DATE TIME ASSETTED BY AFFICATION						5	AST STUST	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANALYSES AT ANALYSES	REQUESTED DUE DATE:
				6/7/10/1400	amin, envo						-0/A	Sample ID#			6/15/10

THIRD QUARTER 2010



Client:

Covanta Energy

10500 Buckingham Rd.

Suite 400

Fort Myers, FL 33905

Phone: Fax:

1-239-337-2200 1-239-337-2510

E-mail:

Project Name: As

Ash Belt

Laboratory Test Report

Lab Project #: N1009054

Page 1 of

All subsequent pages are identified by: N1009054. 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

QUALIFIER DEFINITIONS

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- 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.
- 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.
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- Z: Too many colonies were present for accurate counting.

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Approved by:

Comments:

Andrew Konopacki
Operations Manager

Nokomis Lab ~ 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-6774 ~ HRS Certification # E84380 Fort Myers Lab 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

Page: Page 1 of 1

Client Project: Ash Belt

Lab Project: N1009054

Report Date: 09/23/10

42	mple Descr	22.65.5.7		<u>N</u>	<u>Iatrix</u>	Sample Tyj	- 100 miles	2.7 5486.13	mple Date/	
N1009054-01 4 H	r. Ash Compos	site			Other	composite	9/7/10	10:00	9/2/10 13:5	50
<u>Parameter</u>	Result	<u>Qual</u>	<u>MDL</u>	<u>PQL</u>	<u>Units</u>	Method	Batch #	Analysis Date/Time	<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: 1.10 Start Time: 08 Finish Time: 10
Field ID # <u>WTF070110</u>	Discarded Residue weight: 23 435 Size: 3-2 Type: Rock of A43 Date: 8-5-10 Start Time: 0930 Finish Time: 1320
Monthly Composite # 2	· ·
Field ID # WTE 080510	Discarded Residue weight: 25 185 Size: 5-5 Type: Rock of ASS Date: 9-2-10 Start Time: 1000 Finish Time: 1350
Monthly Composite # 3	
Field ID #WTE090210	Discarded Residue weight: 28 439 Size: 5-2 Type: Rodr glass
	Lab ID. For Hg sample N 1009054

- 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 9.7.10 09 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.

		aboratories INC.	invironmental Testing Services
V	Ĭ.	J	Gowill

CHAIN-OF-CUSTODY RECORD

+10	Jo.
(A) (A)	Page
PROJECT W	
PRO	

Client COVANTA ENCRGY
Address 10500 Buchingham Rd.
FT. Myers FL 33905

Fах

Phone

FF		
3		
Nile		
Report To:	Bill To:	P.O. #

H₂SO₄ = S, NaOH = SH, NH₄CI = NH

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

2EL1	duers	,		01-51-6
Project Name: H3N 196L	Project Location: FT. Wuene	Customer Type:	Kit # FOR LAW	REQUESTED DUE DATE:

Sampled	Sampled By (PRINT)	<i>₹</i>			PRESERVATIVES	ANALYSES ANALYSES	\ \ \	\ \ \	\	<u> </u>	
	104120	() Dealer				MECOES	\ \ \	\ \ \	<u>'</u>	\	
Sampler	Sampler Signature	7	Sample			_	//				
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9-036	1-030506			Jed 1193	S	10164	10%	ten Br	ر	9710	8
	COMMENTS:	OKAY TO RUN ASIS.									
		CLIENT INITIAL:									
	F E	SAMPLES ON ICE									
	5,5	Yes (No									



Client:

Covanta Energy

10500 Buckingham Rd.

Suite 400

Fort Myers, FL 33905

Phone:

1-239-337-2200

Fax: E-mail: 1-239-337-2510

Project Name:

WTE Ash Belt Composite

Laboratory Test Report

Lab Project #: N1009055

Page 1 of

All subsequent pages are identified by: N1009055. 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

OUALIFIER DEFINITIONS

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- Z: Too many colonies were present for accurate counting.

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Approved by:

Comments:

Andrew Konopacki Operations Manager

Nokomis Lab ~ 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-6774 ~ HRS Certification # E84380 Fort Myers Lab ~ 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457

SANDERS LABORATORIES, INC.

Laboratory Test Report

Client: Covanta Energy

anta Energy Page: Page 1 of 1

Client Project: WTE Ash Belt Composite Lab Project: N1009055

Report Date: 09/24/10

Lab ID	Sample Descr	<u>iption</u>		<u>.</u>	<u>1atrix</u>	Sample Ty	pe Received	Date/Time Sa		
N1009055-01	4 Hr. Ash Compos	site/3rd Qrt.	Comp		Other	composite	9/7/10	0.10:00	9/2/10 13:5	50
<u>Parameter</u>	Result	<u>Qual</u>	MDL	<u>PQL</u>	<u>Units</u>	Method	Batch #	<u>Analysis</u> <u>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: 110 Start Time: 09 Finish Time: 12
Field ID # <u>WTE07011</u> 0	Discarded Residue weight: 23 435 Size: 3-2" Type: Rock glass
Monthly Composite # 2	Discarded Residue weight: 23 435 Size: 3-2 Type: Rock of 145 Date: 8:5-10 Start Time: 0930 Finish Time: 1320
Monthly Composite # 3	Discarded Residue weight: 25435 Size: 5-2 Type: Rodr glass Date: 9-2-10 Start Time: 1000 Finish Time: 1350
Field ID #WTE0902 10	Discarded Residue weight: 28 435 Size: 5-2 Type: Rock glass
· .	Lab ID. For Hg sample N 1009054

- 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 9.7.10 09 00 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

COOSE	Page Of 1
PROJECT N	

Client COVANTIA ENERGY
Address 10500 BUCKINg hAM Rd.
FT. Myere FL 33905

Fax

Phone

o Diff	•
M	
Report To:	

Bill To: ______

Preservative: HCI = H, HNO₃ = N, Na₂S₂O₃ = ST, H₂SO₄ = S, NaOH = SH, NH₄CI = NH

Sampled By (BRINT)			PRESERVATIVES	ANALYSES / CO A CONTRACT / CONTRA	
Sampler Signature		Sample			
SAMPLE DESCRIPTION			ICE DH	1 / / SA STO BY SON	eldmis //
he Ash composite	ź	01.10 8-0-1			
INR ASh composite		8.5.10 930			
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		I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	REUNOUISHED BY (4) FELLYNON - 1	NOTIVALE OF THE ACCRETATE OF THE PARTIE OF THE OFFICE OFFI	DAVIE TIME
				19.7.10 10 10 10 10 10 10 10 10 10 10 10 10 1	9-7101600
COMMENTS:	OKAY TO BUN AS IS				
	CLIENT INITIAL:				
£	SAMPLES ON ICE				

FOURTH QUARTER 2010



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

Laboratory Test Report

Lab Project #: N1012080

Page 1 of

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

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- Q: Sample held beyond acceptable holding time.
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- 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

> Nokomis Lab ~ 1050 Endeavor Ct. ~ Nokomis, FL 34275-3623 ~ Phone: 941-488-8103 ~ Fax: 941-484-6774 ~ HRS Certification # E84380 Fort Myers Lab ~ 10090 Bavaria Road ~ Fort Myers, FL 33913 ~ Phone: 239-590-0337 ~ Fax: 239-590-0536 ~ HRS Certification # E85457

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> Eabild</u>	Sample Descr	<u>lption</u>		į	latrix -	Sample Ty	pe Received	Date/Time Sa	imple Date	/Time
N1012080-01	12-2-10 4 Hr Com	ıp.		1001110101010101010101010101010101010101	Other	grab	12/6/10	12:40	12/2/10 13:	15
<u>Parameter</u>	Result	Qual	MDL	POL	<u>Units</u>	Method	Batch #	<u>Analysis</u> Date/Time	<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: 13

Field ID #WTE 100710 Discarded Residue weight: 31 LBG Size: 570 Type: 9 LBSS

Monthly Composite # 2

Date: 11-4-10 Start Time: 1030 Finish Time: 1420

Field ID #WTE 110410 Discarded Residue weight: 32 Los Size: 5" L 2" Type: Rock, Glass, Metal

Monthly Composite # 3

Date: 12-2-10 Start Time: 0925 Finish Time: 1315

Field ID #WTE 120210 Discarded Residue weight: 24 Bs Size: 5102 Type: Ruck, Glass, Metal

Lab ID. For Hg sample N 1012080

- 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.

Date & Time Composite Prepared 12-610 Lab ID # 1012079

- 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

080810111	
PROJECT	=

Page of

ASH BELT

Project Name:

Project Location: FT

Client Coural of Celer Bill 7
Address 10500 Bucking Man Ro P.O.

Fax

Phone__

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Niks	Share		HCI = H, HN	$H_2SO_4 = S, N$
Report To:	Bill To:	P.O. #	Preservative:	

	2 2 A.B. 1288 (1941)	DATE: 12/14/10	harman ha
Customer Type:	Kt #	REQUESTED DUE DATE:	

Sar	Sampled By (PRINT) //			PRESERVATIVES	ANALYSES /		///
		Crook			HEQUES /		
Sar	Sampler Signature		Sample		788		
Matrix	NOTHINESSED E DEWYS		EGVIT SIMIT SITA	ICE DH			/ / Sample ID#
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Bol	Bottle Lot a		RELINGUIS	SHED BY (ARFIBIATION	DAYYE TIME	ASSEPTION SY//AFFILIATION	DAVE: TIME
F	1-036-1076		HARL	1/1	12.6.10124P	Muage	12/6/10 1240
	COMMENTS:	OKAY TO RUN AS IS					
		CLIENT /					
		SAMPLES ON ICE					
	·	Yes Mo					



Client:

Covanta Energy

10500 Buckingham Rd.

Suite 400

Fort Myers, FL 33905

Phone: Fax:

1-239-337-2200

rax.

1-239-337-2510

E-mail:

Project Name:

Ash Belt

Laboratory Test Report

Lab Project #: N1012079

Page 1 of

All subsequent pages are identified by: N1012079. 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

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.

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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: N1012079

Report Date: 01/03/11

<u>Lab ID</u> N1012079-01	Sample Descri 4th Qrt. Comp. Sar			<u>.</u>	<u>Matrix</u> Other	Sample Ty composite		<u>l Date/Time</u> <u>Sa</u> 10 12:40	mple Date/ 12/6/10 11:	
<u>Parameter</u>	Result	Qual	MDL	POL	<u>Units</u>	Method	Batch #	<u>Analysis</u> <u>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	HBÆL	E96080



ASH COMPOSITE WORKSHEET

Monthly Composite # 1	Date: 10.7.10 Start Time: 29 Finish Time: 13 35
Field ID #WTE 100710	Discarded Residue weight: 31 189 Size: 5 To Type: 9185 Date: 11-4-10 Start Time: 1030 Finish Time: 1420
Monthly Composite # 2	Date: 11-4-10 Start Time: 1030 Finish Time: 1420
Field ID # <u>WTE //04/1</u> 0	Discarded Residue weight: 32 635 Size: 5" L 2" Type: Rock, Glass, Metal
Monthly Composite # 3	Date: 12-2-10 Start Time: 0925 Finish Time: 1315
Field ID # WTE 120210	Discarded Residue weight: 24/285 Size: 5/02 Type: Rode, Class, Metal
	Lab ID. For Hg sample N 1012080

- 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 /2-10-10 Lab ID # 1012079

//30

- 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

Morabid	
PROJECT #	

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Project Name: 454 BC. Project Location:

Customer Type:___

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

Report To: Milto Duff

Bill To: P.O. #

Client COVANTA INCRAY

Address 10500 BUCKING MAIN, FT. MUCRS , FL 33905

FT. MYCRS FL

Phone_

Sampled By (PRINT)			PRESERVATIVES	ANALYSES A C/	/ / //	//	
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	CLIENT INITIAL:						
	SAMPLES ON ICE						
	Yes (No)						