

## REMEDIAL INVESTIGATION (RI) REPORT VOLUME II: Data Usability Summary Reports (DUSRs)

15-ACRE PRAXAIR SITE 137 47<sup>TH</sup> STREET NIAGARA FALLS, NEW YORK Abridged version due to web site limitations. For complete document visit the document repository

Prepared for:

Covanta Niagara, L.P. 100 Energy Boulevard at 56<sup>th</sup> Street Niagara Falls, New York 14304

March 2013

## **REMEDIAL INVESTIGATION OF 15-ACRE PRAXAIR SITE**

## 137 47th STREET

## NIAGARA FALLS, NEW YORK RI REPORT VOLUME II TABLE OF CONTENTS

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## **SECTION 1**

MAY 2012 SOIL SAMPLES-SDG 12:2132, 12:2150

## DATA USABILITY SUMMARY REPORT

## **COVANTA RECOVERY SITE**

## **SOIL SAMPLES COLLECTED MAY 2012**

SDG 12:2132, 12:2150 Volatile Organics, Semivolatile Organics Pesticides, PCB, Metals

Prepared for:

LABELLA ASSOCIATES, P.C.
Olympic Towers
300 Pearl Street, Suite 325
Buffalo, NY 14202

Prepared by:

DATAVAL, Inc. 518 Hooper Rd., PMB 283 Endwell, NY 13760

## **SECTION 1.1**

**Volatiles** 

## DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2132 - 2150 Sampled May 2012

## VOLATILE ORGANICS

TP-01-1'-3'	(12:2132-01)	TP-02-6"	(12:2132-02)
TP-18-1'-2'	(12:2132-03)	TP-18-2'-2.75'	(12:2132-04)
TP-15-6"-1.25'	(12:2132-05)	TP-14-2.5'-5.5'	(12:2132-06)
TP-10-4'-6'	(12:2132-07)	TP-20-1'-2'	(12:2132-08)
TP-22-1'-2.5'	(12:2132-09)	TP-22-1'2.5'	(12:2132-16)
TP-30-2.5'-4'	(12:2150-01)	TP-30-4'-5'	(12:2150-02)
TP-23-2.5'-3.5'	(12:2150-03)	TP-28-3.5'-4'	(12:2150-04)
TP-26-1.5'-2.5'	(12:2150-05)	TP-24-2.75'-3.5'	(12:2150-06)
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## DATA ASSESSMENT

A volatile organics data package containing analytical results for sixteen soil samples was received from Labella Associates, P.C. on 16Jul12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-24, Rev. #2, August 2008, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B) was used as a technical reference.

Acetone should be interpreted as undetected in this group of samples. Acetone concentrations, when present, are assumed to represent laboratory artifacts.

The acetone and methylene chloride results reported from this project have been qualified as estimations due to poor calibration performance.

The results reported from TP-18-1'-2', TP-15-6''-1.25', TP-20-1'-2', TP-22-1'-2.5', TP-22-1'-2.5DUP and TP-26-1.5'-2.5' have been qualified as estimations due to poor surrogate standard recoveries.

The TIC's reported from TP-14-2.5'-5.5' and TP-30-2.5'-4' have been flagged as presumptive identifications and estimated concentrations because mass spectra references were not provided to confirm these identifications.

## CORRECTNESS AND USABILITY

It is noted that the laboratory did not consistently report analyte concentrations between the method detection limit and the reporting limit as present. The detection limits, as reported, are correct, but concentrations below this level may be present.

It is also noted that the laboratory included analytes that were not targeted by this program in its instrument calibrations. When detected in samples, these analytes were not reported on Form 1 because they were not targeted by this program. They were also not reported as TIC's because they were included in the instrument calibration.

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be quaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 22 July 12

## Sample History

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the Verified Time of Sample Receipt Samples must remain chilled to 4°C between the time of collection and the time of analysis. Acid preserved VOA samples must be analyzed within 12 days of VTSR, unpreserved samples within 5 days. The holding time for soils is 12 days.

This sample delivery group contained sixteen soil samples that were collected from the Covanta Recovery site between 14May12 and 16May12. Ten samples were collected on 14May12 and 15May12. They were shipped to the laboratory, via a laboratory courier on 15May12, arriving the next day. The final six samples were collected on 16May12. They were shipped to the laboratory on the day of collection and received on 17May12. Both shipments of samples arrived intact and properly chilled, with custody seals in place. Cooler temperatures of 1°C and 3°C were recorded at the time of sample receipt. The analysis of each sample was completed by 22May12, satisfying the ASP holding time limitations.

## Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Two method blanks were analyzed with this group of samples. Although both of these blanks demonstrated acceptable chromatography, both contained traces of acetone. Similar artifacts were found throughout this group of samples. Acetone should be considered undetected in this group of samples. Detection limits equaling PQL or the reported concentration, which ever is larger, should be assumed.

## MS Tuning

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence that included samples from this program. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

## Calibrations

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range

through which measurements may be made. Continuing calibration check standards verify instrument stability.

The initial instrument calibration was performed on 11May12. Standards of 1, 5, 20, 50, 100, 150 and  $200 \mu g/l$  were included. This calibration incorporated a heated purge. With the exception of acetone and methylene chloride, each analyte targeted by this program produced the required levels of instrument response and demonstrated an acceptable degree of linearity. methylene chloride standards produced the required levels of response, they demonstrated poor linearity. Although errors might be expected in measurements of methylene chloride, it may be assumed that this analyte would be detected if present in samples. Because methylene chloride was not found in samples, data qualifications are not required.

Acetone also demonstrated poor linearity. The acetone concentrations found in this group of samples have been qualified as estimations based on this performance.

Calibration check standards were analyzed on 18May12 and 22May12, prior to each 12-hour period of instrument operation that included samples from this program. When compared to the initial calibrations, both checks demonstrated unacceptably large shifts in the response of acetone and methylene chloride. The acetone and methylene chloride results reported from this group of samples have been qualified as estimations based on this performance.

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Although Surrogate Summary Sheets were properly prepared, the laboratory applied its own acceptance criteria. When compared to the ASP requirements, unacceptably low recoveries were reported for the toluene-d8 additions to TP-18-1'-2', TP-15-6"-1.25', TP-20-1'-2', TP-22-1'-2.5', TP-22-1'-2.5DUP and TP-26-1.5'-2.5'. results reported from these samples have been qualified as estimations due to this indication of negative bias.

## Internal Standards

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. When compared to this criteria, acceptable performance was demonstrated by the internal standard additions to each program sample.

## Matrix Spikes

Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

TP-02-6" was selected for matrix spiking. The correct mixture of analytes was added to two portions of this sample. The recoveries reported for these additions demonstrated acceptable levels of measurement accuracy and precision.

Two spiked soil blanks (LCS) were also analyze with this group of samples. Both of these LCS produced acceptable analyte recoveries.

## Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

Field split duplicates of TP-22-1'-2.5' were included in this delivery group. A trace of carbon disulfide was present in TP-22-1'-2.5' but absent in the duplicate. Acetone was present in both samples, but assumed to represent a laboratory artifact. Both samples were otherwise negative.

## Reported Analytes

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument printouts. Reference mass spectra were provided to confirm the identification of each analyte that was detected in this group of samples. Reported concentrations have been adjusted to reflect sample size and moisture content.

Although Tentatively Identified Compounds (TIC) were reported, mass spectra references were not provided to support the laboratory's identifications. Although most of these identifications appear to be appropriate, this cannot be confirmed without the missing spectra references. The TIC's reported from TP-14-2.5'-5.5' and TP-30-2.5'-4' have been qualified as "NJ" to indicate an estimated concentration and a presumptive identification.

It is noted that the laboratory did not consistently report analyte concentrations between the method detection limit and the reporting limit as present. The detection limits, as reported, are correct, but concentrations below this level may be present. It is also noted that the laboratory included analytes that were not targeted by this program in its instrument calibrations. When detected in samples, these analytes were not reported on Form 1 because they were not targeted by this program. They were also not reported as TIC's because they were included in the instrument calibration.

SAMPLED: May 2012

COVANTA RECOVERY SITE

CONFIRM		ALL NJ	ALL NJ	
SUROGATES	ALL J/UJ	ALL UJ	ALL J/UJ ALL UJ	ALL J/UJ
CALIBRATE CALIBRATE ACETONE METHCL	8.63UJ 8.62UJ 10.8UJ	12.800 10.700 11.800	11.60J 10.00J 36.10J	13,90J 10,80J 11,90J
CALIBRATE ACETONE	1190J 17.20J 58.10J	25.70J 27.60J 58.20J	30.40J 20.00J 400UJ 75.30J	1420J 47.50J 63.30J
BLANK	119U 17.2U 58.1U	25.7U 27.6U 58.2U	0	377
	2:2132- 2:2132- 2:2132-	2:2132- 2:2132- 2:2132- 2:2132-	22.2132 22.2132 22.2150 22.2150	(12:2150- (12:2150- (12:2150-
	P-01-1'-3' P-02-6" P-18-1'-2' P-18-2'-2'7	P-15-6"- P-14-2.5 P-10-4'-	22-1' 22-1' 30-2. 30-4'	P-28-3.57-4' P-26-1.57-2. P-24-2.75'-3

## **SECTION 1.2**

## **Semivolatiles**

## DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2132 - 2150 Sampled May 2012

## SEMIVOLATILE ORGANICS

TP-01-1'-3'	(12:2132-01)	TP-02-6"	(12:2132-02)
TP-18-1'-2'	(12:2132-03)	TP-18-2'-2.75'	(12:2132-04)
TP-15-6"-1.25'	(12:2132-05)	TP-14-2.5'-5.5'	(12:2132-06)
TP-10-4'-6'	(12:2132-07)	TP-20-1'-2'	(12:2132-08)
TP-22-1'-2.5'	(12:2132-09)	S\$-1	(12:2132-10)
SS-2	(12:2132-11)	55-3	(12:2132-12)
SS-4	(12:2132-13)	SS-5	(12:2132-14)
SS-6	(12:2132-15)	TP-22-1'2.5'DUP	(12:2132-16)
SS-1DUP	(12:2132-17)	TP-30-2.5'-4'	(12:2150-01)
TP-30-4'-5'	(12:2150-02)	TP-23-2.5'-3.5'	(12:2150-03)
TP-28-3.5'-4'	(12:2150-04)	TP-26-1.5'-2.5'	(12:2150-05)
TP-24-2.75'-3.5'	(12:2150-06)		

## DATA ASSESSMENT

A semivolatile organics data package containing analytical results for twenty-three soil samples was received from Labella Associates, P.C. on 16Jull2. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-22, Rev. #4, August 2008, Validating Semivolatile Organic Compounds by Gas Chromatography / Mass Spectrometry SW-846 Method 8270D was used as a technical reference.

The bis(2-ethylhexyl)phthalate concentrations from SS-4 and TP-22-1'-2.5'DUP, and the di-n-octylphthalate result from TP-18-1'2' have been flagged as estimations because they may represent laboratory artifacts.

The 2-chloronaphthalene, indeno(1,2,3-cd)pyrene, atrazine and benzaldehyde results from this project; and the di-n-octyl-phthalate and caprolactam results from SS-4 and SS-1DUP have been qualified as estimations due to poor calibration performance.

The organic acids reported from TP-18-1'-2', TP-14-2.5'-5.5' and TP-30-2.5'-4' have been qualified as estimations due to low surrogate standard recoveries.

The naphthalene results from SS-1 and SS-1DUP have been rejected due to a poor agreement between field split duplicate samples. The fluoranthene and phenanthrene results from SS-1 and SS-1DUP have been qualified as estimations.

The identifications of dibenz(a,h)anthracene in TP-14-2.5'-5.5', SS-1, SS-2 and SS-1DUP were not conclusive based on the mass spectra references included in the raw data. Dibenz(a,h)-anthracene should be considered undetected in these samples.

The Tentatively Identified Compounds (TIC) reported from this project have been flagged as presumptive identifications and estimated concentrations because mass spectra references were not provided to confirm these identifications.

## CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J" or "UJ". Data felt to be unreliable has been identified with a

single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin Date: 22 July 12

SAMPLED: May 2012

## COVANTA RECOVERY SITE

DUPE	E FLUORANTH.	
DUPE	NAPHLENE	
SURROGATES	ACIDS*	
CALIBRATE	CAPROLACTAM	
CALIBRATE	DI-N-OCTPHTH	
CALIBRATE	BENZALDE	

		DENGERALE	DA-IN-OCAEMAIN	משו השוו השום	COTTON	המינורון זעינו	THOOPINTII.
2-01-	:2132-0	24					
0-2	:2132-0	$\frac{2}{2}$					
2-18-1'-	1:2132-0	9			ALL 848UJ		4
2-18-2'-2.7	2:2132-0	99					
2-15-6"-1	2:2132-0	99					
9-14-2.5'-	2:2132-0	31			ALL 18300J		
P-10-4'-	2:2132-0	73				la.	
P-20-	2:2132-0	69					
2-22-1'-	2:2132-0	59					
3-1	2:2132-1	20				REJECT	184000
ED	2:2132-1	99					
T)	2:2132-1	7					
88-4	(12:2132-13)	3850J	3850J	3850J			
3	2:2132-1	89					
S <sub>1</sub>	2:2132-1	55					
P-22-	2:2132-1	50					
S-1DU	2:2132-1	20	5620UJ	5620UJ		REJECT	33100J
P-30-2	2;2150-0	V			ALL 5400J		
P-30-4'	2:2150-0	370					
P-23-2.5	2:2150-0	11					
P-28-3.	2:2150-0	080					
P-26-1.5'-2	2:2150-0	160					
P-24-2.75'-3.5	2:2150-(						

4-chloro-3-methylphenol, 2-chlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 4,6-dinitro-2-methylphenol, 2-methylphenol, 3&4-methylphenol, pentachlorophenol, phenol, 2,4,5-trichlorophenol, 2,3,4,6-tetrachlorophenol ACIDS =

SAMPLED: May 2012

COVANTA RECOVERY SITE

		BLANKS BIS (2ETHHEX) PHTH	BLANKS DI-N-OCTPHTH	CALIBRATE 2-CLNAPHTH	CALIBRATE IND(123CD)PYR	CALIBRATE ATRAZINE
TP-01-1'-3' (12:21) TP-02-6" (12:21) TP-18-1'-2' (12:21) TP-18-2'-2.75' (12:21) TP-15-6"-1.25' (12:21) TP-10-4'-6' (12:21) TP-20-1'-2' (12:21) TP-20-1'-2' (12:21) TP-20-1'-2' (12:21) SS-1 SS-3 SS-3 SS-4 SS-5 SS-6 TP-22-1'-2.5' DUP (12:21) TP-22-1'-2.5' DUP (12:21) TP-30-2.5'-4' (12:21) TP-30-4'-5' (12:21) TP-26-1.5'-2.5' (12:21) TP-26-1.5'-2.5' (12:21)	32-01) 32-02) 32-03) 32-04) 32-04) 32-04) 32-04) 32-04) 32-04) 32-10) 32-11) 32-12) 132-14) 132-14) 132-14) 132-17) 132-17) 132-17) 150-02) 150-04)	464J	210J	32400 332900 333900 335900 1626000 358000 358000 359000 359000 359000 359000 359000 359000 359000	3240J 33240J 33390J 3860J 37300J 37300J 23100J 2360J 2360J 3590J 3590J 3590J 3590J 3590J 3590J 3590J 3590J 3590J 3590J 3590J	32400 339000 339000 336000 339000 359000 366000 355000 355000 355000 355000 31600 31600 31600

SAMPLED: May 2012

MS ID

SPECTRA ID DIBENZ (AH) ANTH

DUPES PHENANTH

COVANTA RECOVERY SITE

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2:2132- 2:2132-	$\dashv$	21	21	76	7	12	5	2	2	7	7	2	2	2	:21	:21	N	:21	2:215
99	##	<u> </u>	5,	15			15	15	!=	:=	! 5		_	크	7	5, (1	I)	5, (1	.5
1	55	7-1.25	, i	72,	-2.5'	· ·						2.5' DUP		57-41	-3,	5'-3.	,2,-4,	5'-2,	,75′-3
4-1 CA	8-27	.5-6"	4 0		-22-1'	1	۱۵	၊ ကု	4	· kr	9	-22-1'	-1DUP	8	30-	$\Delta$ i	28-	787	-24-2
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## **SECTION 1.3**

**Pesticides** 

## DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C. 300 Pearl Street, Suite 325 Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2132 - 2150 Sampled May 2012

## PESTICIDES

SS-1	(12:2132-10)	SS-2	(12:2132-11)
58-3	(12:2132-12)	SS-4	(12:2132-13)
SS-5	(12:2132-14)	SS-6	(12:2132-15)
SS-1DUP	(12:2132-17)	TP-30-2.5'-4'	(12:2150-01)
TP-30-4'-5'	(12:2150-02)	TP-23-2.5'-3.5'	(12:2150-03)
TP-28-3.5'-4'	(12:2150-04)	TP-26-1.5'-2.5'	(12:2150-05)
TP-24-2.75'-3.5'	(12:2150-06)		

## DATA ASSESSMENT

A Pesticide data package containing analytical results for thirteen soil samples was received from Labella Associates on 16Jul12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8081, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-44, Rev. October 2006, Validating Pesticide Compounds by Gas Chromatography SW-846 Method 8081B was used as a technical reference.

The positive pesticide results from this project have been qualified as estimations because the calculations could not be duplicated.

The 4,4'-DDE concentration from SS-2 and the 4,4'-DDD result from SS-6 have been qualified as estimations due to poor peak resolution.

The Endrin Ketone concentration from SS-1 and the 4,4'-DDT result from SS-1DUP have been qualified as estimations due to differences observed in field split duplicate samples.

Analyte concentrations throughout this report have been qualified as J, NJ or Reject, based to the level of agreement between results from two different chromatographic columns.

## CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

## ANALYTE IDENTIFICATIONS

Analytes must be detected at similar concentrations on two different chromatography columns to be considered present. The quality of the identification is based on the percent difference (%D) between this pair of measurements. The laboratory, however, reported the Relative Percent Difference (%RPD) in the raw data. The laboratory's results have been edited where the correction affects the interpretation of data. Data qualifications based on these checks is tabulated below.

SAMPLE	DATA QUALIFICAT	TIONS
SS-1	Gamma-Chlordane	REJECT
SS-2	4,4'-DDE	REJECT
	Heptachlor Epoxide	5.36J
SS-4	Alpha-BHC	14.1J
	Beta-BHC	8.04J
	Delta-BHC	REJECT
	Gamma-BHC	5.52J
	Dieldrin	3.08NJ
	Endosulfan I	74.4NJ
	Endosulfan II	9.65J
	Heptachlor Epoxide	9.19J
SS-5	4,4'-DDT	REJECT
SS-6	Gamma-BHC	1.95J
	4,4'-DDD	11.3NJ
	4,4'-DDT	3.01NJ
	Endosulfan I	14.1NJ
	Endosulfan Sulfate	4.04J
SS-1DUP	Endrin Aldehyde	REJECT
TP-26-1.5'-2.5'	Delta-BHC	2.81J
	Endosulfan II	REJECT

SAMPLED: May 2012

SITE
RECOVERY
COVANTA

		CALIBRATE	RESOLUTION 4,4'-DDE	RESOLUTION RESOLUTION 4,4'-DDD	DUPE ENDRIN KETONE	DUPES	CONF ID G-CHLORDANE	
- 1	2:2132-				7.733		REJECT	
- 1	2:2132-		19,37					
88-3	2:2132-	ALL POS J						
Ť	2:2132-							
ī	2:2132-							
88-6	:2132-	ALL POS J		11.33				
SS-1DUP	2:2132-					8.14J		
TP-30-2.5'-4'	2:2150-							
TP-30-4'-5'	2:2150-							
-23-	2:2150-							
TP-28-3.5'-4'	2:2							
Ÿ	:2150-	ALL POS J						
김	(12:2150-06)							

## COVANTA RECOVERY SITE

SAMPLED: May 2012 DIELDRIN CONF ID 3.08NJ CONF ID G-BHC 5.527 1.95J CONF ID D-BHC REJECT 2,815 CONF ID 8,043 B-BHC CONF ID A-BHC HEPT EPOX CONF ID 9.193 5.36J CONF ID 4,4' DDE REJECT (12:2132-11) (12:2132-12) (12:2132-13) (12:2132-14) (12:2132-15) (12:2150-02) (12:2150-03) 12:2150-04) 12:2150-05) (12:2150-06) 12:2150-01 12:2132-10 12:2132-17 TP-23-2,5'-3,5' (TP-28-3,5'-4' (TP-26-1,5'-2,5' (TP-24-2,75'-3,5' (TP-24-2,75'-3,5' (TP-24-2,75'-3,5') TP-30-2.5'-4' TP-30-4'-5' SS-1DUP \$3-1 \$3-2 \$3-3 \$3-4 \$3-5 \$3-5

## COVANTA RECOVERY SITE

CONFIRM ID	ENDOSULFAN SO4
CONF ID	4,4' DDD
CONF ID	4,4'DDT
CONFIRM ID	ENDOSULFAN II
CONFIRM ID	ENDOSULFAN I

SAMPLED: May 2012

	2:21						
- 1	2:21						
	2:21						
SS-4	2:21	74,4NJ	9.657				
	2:21			REJECT			
SS-6	(12:2132-15)	14.1NJ		3,01NJ	11.3NJ	4.043	
Π	2:21						
n	2:21						
-30-4'-5'	2:21						
-23-2,5'-	2:21						
-28-3,5'-4'	2:2						
-26-1.	2:21		REJECT				
-24-2,75'-3,5	(12:2]						

SAMPLED: May 2012

## COVANTA RECOVERY SITE

CONFIRM ID	FUDRIN ALDEHYDE

2:2132-1	(12:2132-12)	2:2132-1	2:2132-1	2:2150-0	2:2150-0	2:2150-0	2:2150-0	2:2150-0	2:2150-0
0 0	SS 13	2 2	S-1DU	P-30-2.5	P-30-47	P-23-2.5'-3	P-28-3,5'-4'	P-26-1.5'-2.5	-24-2,75'-3

REJECT

## **SECTION 1.4**

**PCBs** 

## DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

## COVANTA RECOVERY SITE Soil Samples SDG: 12:2132 - 2150 Sampled May 2012

## PCB

TP-01-1'-3'	(12:2132-01)	TP-02-6"	(12:2132-02)
TP-18-1'-2'	(12:2132-03)	TP-18-2'-2.75'	(12:2132-04)
TP-15-6"-1.25'	(12:2132-05)	TP-14-2.5'-5.5'	(12:2132-06)
TP-10-4'-6'	(12:2132-07)	TP-20-1'-2'	(12:2132-08)
TP-22-1'-2.5'	(12:2132-09)	SS-1	(12:2132-10)
SS-2	(12:2132-11)	SS-3	(12:2132-12)
\$\$-4	(12:2132-13)	SS-5	(12:2132-14)
SS-6	(12:2132-15)	TP-22-1'2.5'DUP	(12:2132-16)
SS-1DUP	(12:2132-17)		

## DATA ASSESSMENT

A PCB data package containing analytical results for seventeen soil samples was received from Labella Associates, P.C. on 16Jul12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8082, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. the required protocol was not followed, the current EPA Region II (SOP HW-45, Rev. #1, October Functional Guidelines Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A) was used as a technical reference.

The concentrations of AR1254 found in this group of samples have been qualified as estimations due to poor calibration performance.

The AR-1254 concentrations from SS-1 and TP-22-1'2.5'DUP have been qualified as estimations due to poor agreement between field split duplicate samples.

## CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data However, DATAVAL, Inc. does not warrant assessment. interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin Date: 22 JUL 12

## DATA QUALIFICATIONS

## COVANTA RECOVERY SITE

COVANTA RECOVERY SIFE	SITE			Sampled May 2012
		CALIBRATE AR-1254	FIELD DUPLICATES AR-1254	
TP-01-1'-3'	(12;2132-01)			
TP-02-6"	(12:2132-02)	0.0195J		
TP-18-1'-2'	(12:2132-03)			
TP-18-2'-2.75'	(12:2132-04)			
TP-15-6"-1.25'	(12:2132-05)			
TP-14-2.5'-5.5'	(12:2132-06)			
TP-10-4'-6'	(12:2132-07)			
TP-20-1'-2'	(12;2132-08)			
TP-22-1'-2.5'	(12:2132-09)			
SS-1	(12:2132-10)	0.0381J	0.0381J	
SS-2	(12:2132-11)	0.493J		
55-3	(12:2132-12)			
SS-4	(12:2132-13)			
SS-5	(12:2132-14)			
SS-6	(12:2132-15)			
TP-22-1'2.5'DUP	(12	0.05163	0.0516J	
SS-1DUP	(12:2132-17)			

## **SECTION 1.5**

**Metals** 

## DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

## COVANTA RECOVERY SITE Soil Samples SDG: 12:2132 - 2150 Sampled May 2012

## METALS

TP-01-1'-3'	(12:2132-01)	TP-02-6"	(12:2132-02)
TP-18-1'-2'	(12:2132-03)	TP-18-2'-2.75'	(12:2132-04)
TP-15-6"-1.25'	(12:2132-05)	TP-14-2.5'-5.5'	(12:2132-06)
TP-10-4'-6'	(12:2132-07)	TP-20-1'-2'	(12:2132-08)
TP-22-1'-2.5'	(12:2132-09)	SS-1	(12:2132-10)
\$\$-2	(12:2132-11)	SS-3	(12:2132-12)
SS-4	(12:2132-13)	SS-5	(12:2132-14)
SS-6	(12:2132-15)	TP-22-1'2.5'DUP	(12:2132-16)
SS-1DUP	(12:2132-17)	TP-30-2.5'-4'	(12:2150-01)
TP-30-4'-5'	(12:2150-02)	TP-23-2.5'-3.5'	(12:2150-03)
TP-28-3.5'-4'	(12:2150-04)	TP-26-1.5'-2.5'	(12:2150-05)
TP-24-2.75'-3.5'	(12:2150-06)		

## DATA ASSESSMENT

An inorganics data package containing analytical results for twenty-three soil samples was received from Labella Associates. P.C. on 16Jul12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contract-Analyses, performed according to SW-846 Methods ed for analysis. 6010 and 7471 addressed Target Analyte List metals. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOW HW-2, Rev. 13, Sep. 2005, Evaluation of Metals Data for the Contract Laboratory Program) was used as a technical reference.

The antimony, arsenic, barium, chromium, cobalt, lead, magnesium, mercury, nickel, thallium and zinc results from this group of samples have been qualified as estimations due to unacceptable matrix spike recoveries. The chromium result from SS-3 and the mercury results from SS-3 and TP-02-6" have been rejected.

With two exceptions, the cadmium, chromium, cobalt, copper, manganese, mercury, nickel, potassium, magnesium, selenium, silver, sodium, vanadium and zinc results from this project have been qualified as estimations due to and field duplicate split differences between laboratory The potassium concentrations reported from SS-1 and samples. SS-1DUP have been rejected.

## CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

It is noted that the laboratory analyzed interference check standards at the beginning of each ICP sequence, but not at the

end of the run as required by ASP protocol. CRDL and serial dilution samples were omitted. The laboratory should be warned of such omissions. They are required elements of an ASP data package. Data has been evaluated based on the information that was provided.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 22 JJy 12

SAMPLED: May 2012

COVANTA RECOVERY SITE

		SPIKES	SPIKES	SPIKES	SPIKES CHROMIUM	SPIKES	SPIKE LEAD	1
1	0-0510-0	780	40	ري ري	1023	г. г.	σ	
-01-		5,8800	26,17	1350J	2857	53.73	7223	
10-05-0	2:2132-0	8.46	4.5	163	1230J	2.4	ري ري	
7 10 01 0	2:2132-0	.39U	.77	ū	28.3J	48	45	
15 6"-1	2:2132-0	34	0.5	95	823J	8.9	157	
14-2 51-5	2:2132-0	19	.36	126	2230J	228	56	
79-79-01-0	2:2132-0	. 63	138	ব'	51.23	.77	83	
11-00-0	2:2132-0	$\Box$	.38	491	1320J	9	d	
-11-00-0	2:2132-0	.57	. 85	10	83.81	2,5	5.5	
1 77 - 1	2:2132-1	.83U	6,2	18	2147	4.5	253	
0 5	2:2132-1	410	0.2	949	426J	0.5	24	
0 5	2:2132-1	.42U	070	40	REJECT	6.4	8 5	
0 0	2:2132-1	.91U	7.0	36	4415	47	97	
ם כ	2:2132-1	_	.71	56	63,75	620	4.	
0 0	2:2132-1	.71	9.	348	321J	0	102	
2-00-0	2:2132-1	70	38	00	95.51	S S	Ó	
GILL S	2:2132-1	. 60	1.6	560	2705	4.0	28	
20170	2:2150-0	0	2	رن س	109J	0.9	4.6	
2-30-4	2:2150-0	.53	.07	ა. ი	10.57	69	13	
0-23-2 5	2:2150-	.92u	.73	2.3	8,95J	.12	85	
	2:2150-0	.690	23	20	1025	37	13	
2-26-1 5/-2	2:2150-0	φ,	35	173	1570J	ъ Ф	9	
24-2.757-3	:2150-0	. 93U	ਚਾ 다 •	9.	38.97	. 78	Ó	

SAMPLED: May 2012

## COVANTA RECOVERY SITE

1		
DUPES. CADMIUM	0.8194 0.69194 0.6954 0.8094 0.60564 0.6024 1.9054 0.8404 0.8404 0.91.1944 0.57774 0.57774 0.57774 0.57774 0.57774 0.57774 0.57774 0.57774	
SPIKE	90.00 35.55 46.74 1211 1484 63.14 32.64 32.64 32.64 32.64 32.64 33.40 34.84 39.04 1434 69.14	
SPIKES	2.820J 2.450J 2.450J 2.710J 2.820J 2.770J 2.420J 2.670J 2.670J 2.670J 2.80UJ 2.720J 2.720J 2.720J 2.890J 3.210J 3.30UJ	
SPIKES	22.03 1363 45.93 17.03 63.13 24.93 1050 1103 1050 71.11 83.23 14.30 16.30 16.30	
SPIKE	0.07655 REJECT 0.00547 0.003397 0.009107 0.008707 0.008507 0.008407 0.03247 0.03247 0.03247 0.03247 0.010147 0.010147 0.06507 0.01677 0.06507 0.06507	
SPIKES	52000 313000 313000 27100 304000 36700 36700 444000 193000 751000 751000 320000 12500 405000 39000	
	(12:2132-01) (12:2132-02) (12:2132-03) (12:2132-04) (12:2132-05) (12:2132-06) (12:2132-07) (12:2132-09) (12:2132-10) (12:2132-11) (12:2132-14) (12:2132-14) (12:2132-15) (12:2132-16) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-01) (12:2132-01) (12:2132-01) (12:2132-01) (12:2132-02) (12:2150-04) (12:2150-04)	
	TP-02-6" TP-18-1"-2" TP-18-2'-2.75" TP-18-2'-2.75" TP-14-2.5'-5.5" TP-10-4'-6" TP-20-1'-2" TP-22-1'-2' TP-22-1'-2' SS-3 SS-4 SS-5 SS-6 TP-22-1'2.5' TP-22-1'2.5' TP-22-1'2.5' TP-22-1'2.5' TP-30-2.5'-4' TP-30-2.5'-4' TP-30-2.5'-4' TP-30-2.5'-4' TP-30-2.5'-4' TP-30-2.5'-4' TP-28-3.5'-4' TP-28-3.5'-4'	

### DATA QUALIFICATIONS

Sampled May 2012

COVANTA RECOVERY SITE

		DUPES CHROMIUM	DUPES	DUPES	DUPES	DUPES MAGNESIUM	DUPES MANGANESE	DUPES MERCURY
0-0	2:2132-0	02	11.50	20.73	60.9J	52007	915J	0.0756J
-00-0	2:2132-0	85	53,70	62.33	7223	£689	3430007	
0-18-1'-	2:2132-0	230	22.4J	23.3J	65,5J	313001	927J	054
5-18-27-27	2:2132-0	8	6,487	12.40	6.45J	27105	1703	.0339
3-15-6"-1	2:2132-0	823	18.97	68.40	1570	108001	105007	0091U
0-14-2 5/-5	2:2132-0	230	2267	14000	1567	304005	3420J	0057
0-10-41-61	2:2132-0	1.2	8,773	13.67	9.837	3670J	522J	.0218
7-02-0	2:2132-0	1320J	3,990	41.27	24.25	304001	17907	0.0085UJ
- 20 -	2:2132-0	3.8	22.5J	44.4J	35.5J	57400J	1080001	.0084U
	7:2132-1	214	34.50	28.8J	253J	44400J	340007	.0424
ו מול	7:2132-1	26	70.53	84.9J	124J	188007	25400J	24
י לא כל	2.2132-1		86.43	68.97	1857	193007	1070001	
ו זור	2:2132-1	41	147J	92.30	1977	4680J	56600J	0.7023
ו מ	2:2132-1	7	5.620J	62.57	95.4J	751005	43901	0.225J
ו /} כ	2-2132-1	321	23.0J	70.95	1023	78805	F0706	NO.
D-22-	2:2132-1	95,57	25.5J	40.63	35,67	489007	1310001	0.010103
S-1007P	2:2132-1	270	54.03	49.61	228J	32000J	61700J	90
D-30-	2:2150-6	09	10.95	21.80	8.46J	92107	5367	0
D-30-4'-	2:2150-0	0,5	4.69J	12.67	4.13J	12600J	432J	0
P-23-2	2:2150-0	95	3.12J	2.49J	2,857	12503	51.73	0
P-28-3 5'-4'	2:2150-0	102	4.37J	250J	113J	41103	2793	90
P-26-1 51-2	2:2150-0	570	15.97	82.90	196J	40500J	63705	800
24-2.75'-3	(12:2150-06)	0,	5.78J	11.37	22,07	39001	3381	0.0283J

### DATA QUALIFICATIONS

Sampled May 2012

COVANTA RECOVERY SITE

DUPES	90.03 31.24 46.74 1214 1214 1214 43.54 33.54 33.54 23.64 33.54 33.54 33.54 33.54 33.54 33.54 33.54 33.54 34.64 30.04 39.04
DUPES VANADIUM	25. 10040 10040 223.020 23.020 23.020 23.020 3160 12.030 12.030 1400 24.030 24.030 24.030 24.030
DUPES SODIUM	351J 228J 228J 228J 336J 6050J 159J 2570J 379J 1730J 1730J 1730J 1730J 193J 193J 1180J
DUPES	1.1305 1.0805 1.0805 1.0805 1.0605 1.1305 1.1105 0.99205 17.75 7.695 21.05 2.235 2.235 2.235 2.235 11.55 2.235 11.55 11.
DUPES	1.130J 1.27J 1.08UJ 1.06UJ 2.02J 1.11UJ 6.26J 4.39J 26.0J 19.8J 1.12UJ 1.09J 36.1J 1.82UJ 1.82UJ 1.09UJ 1.82UJ 1.32UJ 1.32UJ
DUPES	12000 17200 8650 10400 11200 11200 11600 14400 14400 14700 16600 17000 15200 15200 15200
DUPES	22. 14. 15. 17. 17. 10. 10. 10. 10. 10. 10. 10. 10
	(12:2132-01) (12:2132-02) (12:2132-04) (12:2132-04) (12:2132-05) (12:2132-07) (12:2132-07) (12:2132-09) (12:2132-10) (12:2132-11) (12:2132-12) (12:2132-12) (12:2132-12) (12:2132-12) (12:2132-12) (12:2132-16) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17) (12:2132-17)
	TP-01-1'-3' TP-02-6" TP-18-1'-2' TP-18-2'-2.75' TP-15-6"-1.25' TP-14-2.5'-5.5' TP-10-4'-6' TP-20-1'-2' TP-20-1'-2' TP-22-1'-2'5' SS-1 SS-3 SS-4 SS-5 SS-6 TP-22-1'2.5'DUP TP-22-1'2.5'DUP TP-22-1'2.5'-4' TP-28-3.5'-4' TP-28-3.5'-2.5' TP-26-1.5'-2.5' TP-26-1.5'-2.5' TP-26-1.5'-2.5' TP-26-1.5'-2.5'

### **SECTION 2**

MAY 2012 SOIL SAMPLES-SDG 12:2186, 12:2251

### DATA USABILITY SUMMARY REPORT

### **COVANTA RECOVERY SITE**

### **SOIL SAMPLES COLLECTED MAY 2012**

SDG 12:2186, 12:2251 Volatile Organics, Semivolatile Organics PCB, Metals

Prepared for:

LABELLA ASSOCIATES, P.C.
Olympic Towers
300 Pearl Street, Suite 325
Buffalo, NY 14202

Prepared by:

DATAVAL, Inc. 518 Hooper Rd., PMB 283 Endwell, NY 13760

### **SECTION 2.1**

**Volatiles** 

### DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2186 - 2251 Sampled May 2012

### VOLATILE ORGANICS

```
GP-03-7' (12:2186-02)
GP-03-5' (12:2186-01)
                                 GP-06-5' (12:2186-04)
GP-05-5' (12:2186-03)
GP-07-2' (12:2186-05)
                                 GP-07-6' (12:2186-06)
                                 GP-11-4'-5' (12:2186-08)
GP-09-1'-2' (12:2186-07)
                                  GP-16-3' (12:2186-10)
GP-14-7' (12:2186-09)
                                 GP-15-7.5' (12:2186-12)
GP-15-5'-6' (12:2186-11)
GP-18-2'-4' (12:2186-13)
                                 GP-22-6' (12:2186-14)
                                 GP-05-5'DUP (12:2186-16)
GP-02-3.5'-4' (12:2186-15)
                                  C4R-MW-01-6'-8' (12:2251-01)
Trip Blank (12:2186-17
                                 C4R-MW-03-6'-10' (12:2251-03)
C4R-MW-02-2'-6' (12:2251-02)
C4R-MW-05-4'-10' (12:2251-04) C4R-MW-06-4'-10' (12:2251-05)
C4R-MW-05-4'-10'DUP (12:2251-06)
```

### DATA ASSESSMENT

A volatile organics data package containing analytical results for twenty-two soil samples and a trip blank was received from Labella Associates, P.C. on 27Jul12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed STARS and Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region IT Functional Guidelines (SOP NO. HW-24, Rev. #2, August 2008, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B) was used as a technical reference.

Acetone should be interpreted as undetected in this group of samples. Acetone concentrations, when present, are assumed to represent laboratory artifacts.

The acetone and methylene chloride results reported from this project have been qualified as estimations due to poor calibration performance. The trichloroethene results from C4R-MW-01-6'-8', C4R-MW-02-2'-6', C4R-MW-03-6'-10', C4R-MW-05-4'-10', C4R-MW-06-4'-10' and C4R-MW-05-4'-10' DUP have been similarly qualified.

The positive results reported from C4R-MW-01-6'-8' and C4R-MW-05-4'-10' DUP, and all of the results from GP-03-7' and GP-02-3.5'-4' have been qualified as estimations due to unacceptable surrogate standard recoveries.

The n-butylbenzene and naphthalene results from GP-03-7', GP-18-2'-4' and GP-02-3.5'-4' have been qualified as estimations due to poor internal standard performance.

The chlorobenzene results from C4R-MW-01-6'-8', C4R-MW-02-2'-6', C4R-MW-03-6'-10', C4R-MW-05-4'-10', C4R-MW-06-4'-10' and C4R-MW-05-4'-10'DUP have been qualified as estimations due to low matrix spike recoveries.

The TIC's reported from GP-16-3' and C4R-MW-05-4'-10' have been flagged as presumptive identifications and estimated concentrations because mass spectra references were not provided to confirm these identifications.

The identifications of sec-butylbenzene (S-BUTBENZ) in GP-09-1'-2'; o-xylene in GP-03-7'; ethylbenzene (ETHBENZ) and o-xylene in GP-18-2'-4'; and n-butylbenzene (N-BUTBENZ), 1,2,4-trimethylbenzene (124TMB), m+p-xylene and o-xylene in GP-02-3.5'-4' were not conclusive based on the mass spectra references

included in the raw data. These analytes should be interpreted as undetected in the affected samples.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 02 Aug /2

SAMPLED: May 2012

COVANTA RECOVERY SITE

•			
INT SFD IS3	ALL J/UJ	ALL J/UJ	-31
SURROGATES	ALL J/UJ	ALL J/UJ	ALL POS J
CALIBRATE			4.780J 3.670J 3.600J 4.120J
CALIBRATE METH CL		) ) )	12.003 9.1803 10.503 9.0103 10.303
CALIBRATE		37800	53.50J 34.40J 21.00J 18.00J 20.60J
BLANK		3780	53.50 34.40
	2186 2186 2186 2186 2186 2186	2:2186-1 2:2186-1 2:2186-1 2:2186-1 2:2186-1	2:2186- 2:2251- 2:2251- 2:2251- 2:2251- 2:2251-
	11007	362759	2-05-5 rip Bl 4R-MW- 4R-MW- 4R-MW- 4R-MW- 4R-MW-

IS3 = n-butylbenzene, naphthalene

2

SAMPLED: May 2012

## COVANTA RECOVERY SITE

1	
MS ID N-BUTBENZ	4.26UJ
MS ID ETHBENZ	12.4U
MS ID O-XYLENE	4.14UJ 12.4U 4.26UJ
MS ID S-BUTBENZ	4.10U
SPECTRA	ALL NJ
SPIKES	4.780J 3.670J 4.200J 4.120J
	(12:2186-01) (12:2186-02) (12:2186-04) (12:2186-05) (12:2186-06) (12:2186-07) (12:2186-07) (12:2186-10) (12:2186-11) (12:2186-11) (12:2186-12) (12:2186-14) (12:2186-17) (12:2186-17) (12:22186-17) (12:2251-01) (12:2251-03) (12:2251-04) (12:2251-04)
	GP-03-5' GP-03-7' GP-05-5' GP-05-5' GP-07-2' GP-07-2' GP-09-1'-2' GP-11-4'-5' GP-11-4'-5' GP-15-7.5' GP-15-7.5

SAMPLED: May 2012

## COVANTA RECOVERY SITE

MS ID M+P-XYLENE

MS ID 124-TMB

													4.260J								
(12:2186-01) (12:2186-02)	86-0	:2186-0	:2186-0	:2186-0	::2186-0	:2186-0	2:2186-0	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-	2:2251-(	2:2251-(	2:2251-0	2:2251-0	2.5	251-0
GP-03-5' GP-03-7'	P-0	GP-06-5'	-1	GP-07-6'	-60-	GP-11-4'-5'	-14-	걲	ͳ	P-1	GP-18-2'-4'	Ĵ.	P-02-3	GP-05-5' DUP	Trip Blank	C4R-MW-01-6'-8'	C4R-MW-02-2'-6'	C4R-MW-03-6'-10'	C4R-MW-05-4'-10'	C4R-MW-06-4'-10'	C4R-MW-05-4'-10'DUP

4.260J

### **SECTION 2.2**

### **Semivolatiles**

### DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2186 - 2251 Sampled May 2012

### SEMIVOLATILE ORGANICS

```
GP-03-7' (12:2186-02)
GP-03-5' (12:2186-01)
                                  GP-06-5' (12:2186-04)
GP-05-5' (12:2186-03)
                                  GP-07-6' (12:2186-06)
GP-07-2' (12:2186-05)
                                  GP-11-4'-5' (12:2186-08)
GP-09-1'-2' (12:2186-07)
                                  GP-16-3' (12:2186-10)
GP-14-7' (12:2186-09)
GP-15-5'-6' (12:2186-11)
GP-18-2'-4' (12:2186-13)
                                  GP-15-7.5' (12:2186-12)
                                  GP-22-6' (12:2186-14)
GP-02-3.5'-4' (12:2186-15)
                                  GP-05-5'DUP (12:2186-16)
                                  C4R-MW-02-2'-6' (12:2251-02)
C4R-MW-05-4'-10' (12:2251-04)
C4R-MW-01-6'-8' (12:2251-01)
C4R-MW-03-6'-10'(12:2251-03)
C4R-MW-06-4'-10' (12:2251-05)
                                  C4R-MW-05-4'-10'DUP (12:2251-06)
```

### DATA ASSESSMENT

A semivolatile organics data package containing analytical results for twenty-two soil samples was received from Labella Associates, P.C. on 27Jul12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8270, addressed Target Compound List and STARS list analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-22, Rev. #4, August 2008, Validating Semivolatile Organic Compounds by Gas Chromatography / Mass Spectrometry SW-846 Method 8270D was used as a technical reference.

A TIC eluting at 17.94 minutes has been removed from the reports of C4R-MW-01-6'-8', C4R-MW-02-2'-6', C4R-MW-03-6'-10', C4R-MW-05-4'-10', C4R-MW-06-4'-10' and C4R-MW-05-4'-10'DUP because it is assumed to represent a laboratory artifact.

The indeno(1,2,3-cd)pyrene results from each program sample and the 2-chloronaphthalene, atrazine and benzaldehyde results from C4R-MW-01-6'-8', C4R-MW-02-2'-6', C4R-MW-03-6'-10', C4R-MW-05-4'-10', C4R-MW-06-4'-10' and C4R-MW-05-4'-10'DUP have been qualified as estimations due to poor calibration performance.

The identifications of acenaphthene in GP-03-7' and anthracene in GP-15-5'-6' and GP-18-2'-4' were not conclusive based on the mass spectra references included in the raw data. Acenaphthene and anthracene should be interpreted as undetected in the affected samples.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data

assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: June Soldwin Date: 02 Aug 12

SAMPLED: May 2012

## COVANTA RECOVERY SITE

PH.																					
MS ID ACENAPH		3370																			
CALIBRATE BENZALDE																T.11826	1000C	25,411-1	25811	34611.1	36205
CALIBRATE ATRAZINE																35817.7	34507	3540.7	3580J	34600	36200
CALIBRATE 2-CLNAPH																3580J	34500	3540J	3580J	3460J	3620J
CALIBRATE IND (123CD) PYR	35405	33703	50000	33101.7	34911.7	34100	3390J	3450J	3320J	34500	3420J	3640J	3440J	3430J	33705	3580J	3450J	3540J	358UJ	3450J	362UJ
BLANK																REMOVE	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE
	(12:2186-01)	2186-U	7:2186-0	.2185-0	2:2186-0	2:2186-0	2;2186-0	2:2186-0	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2186-1	2:2251-0	2:2251-0	2:2251-0	2:2251-0	2:2251-0	2:2251-0
	GP-03-5		-90-	-07-	-07-	-60-	P-11-4'-	P-14-	P - 16 - 1	P-1	P-15-7.5	P-18-	P-22-	P-0	P-05-5'	C4R-MW-01-6'-8'	4R-MM-02-27-	4R-MW-0	4R-MM-0	4R-MW-06-4'-1	C4R-MW-05-4'-10'DUP

4

SAMPLED: May 2012

### CONTRA RECOVERY SITE

### MS ID ANTHRACENE

2:2186-0 2:2186-0 2:2186-0 2:2186-0 2:2186-0	886-00 886-00 886-11 886-11	2.2251- 2.2251- 2.2251- 2.2251- 2.2251- 2.2251- 2.2251-
GP-03-5' GP-03-7' GP-05-5' GP-06-5' GP-07-2'	0 1 1 1 1 1 1 1 0 0 0 0 1 1 1 1 1 1 1 1	4 4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

345U

3640

### **SECTION 2.3**

**PCBs** 

### DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2186 - 2251 Sampled May 2012

### PCB

GP-07-2'	(12:2186-05)	GP-07-6'	(12:2186-06)
C4R-MW-01-6'-8'	(12:2251-01)	C4R-MW-02-2'-6'	(12:2251-02)
C4R-MW-03-6'-10'	(12:2251-03)	C4R-MW-05-4'-10'	(12:2251-04)
C4R-MW-06-4'-10'	(12:2251-05)	C4R-MW-05-4'-10'DUP	(12:2251-06)

### DATA ASSESSMENT

A PCB data package containing analytical results for eight soil samples was received from Labella Associates, P.C. on 27Jul12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8082, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II (SOP HW-45, Rev. #1, October Functional Guidelines Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A) was used as a technical reference.

### CORRECTNESS AND USABILITY

Reported data should be considered complete, technically defensible, completely usable, and without qualifications in its present form. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin

\_\_ Date: 02/AUG-/2

Sampled May 2012

COVANTA RECOVERY SITE

(12:2186-05) (12:2186-06) (12:2251-01) (12:2251-02) (12:2251-03) (12:2251-04) (12:2251-05) (12:2251-06) C4R-MW-05-4'-10'DUP C4R-MW-05-4'-10' C4R-MW-06-4'-10' C4R-MW-03-6'-10' C4R-MW-01-6'-8' C4R-MW-02-2'-6' GP-07-6' GP-07-2'

### **SECTION 2.4**

**Metals** 

### DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Soil Samples SDG: 12:2186 - 2251 Sampled May 2012

### METALS

C4R-MW-01-6'-8' (	12:2251-01)	C4R-MW-02-2'-6'	(12:2251-02)
C4R-MW-03-6'-10'(	12:2251-03)	C4R-MW-05-4'-10'	(12:2251-04)
C4R-MW-06-4'-10'(	12:2251-05)	C4R-MW-05-4'-10'DUP	(12:2251-06)

### DATA ASSESSMENT

An inorganics data package containing analytical results for six soil samples was received from Labella Associates, P.C. on 27Jul12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Methods 6010 and 7471 addressed Target Analyte List metals. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOW HW-2, Rev. 13, Sep. 2005, Evaluation of Metals Data for the Contract Laboratory Program) was used as a technical reference.

The antimony and potassium results from this group of samples have been qualified as estimations due to unacceptable matrix spike recoveries.

The arsenic, lead, cobalt and manganese results from this project have been qualified as estimations due to large differences between laboratory and field split duplicate samples.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

It is noted that the laboratory analyzed interference check standards at the beginning of each ICP sequence, but not at the end of the run as required by ASP protocol. CRDL and serial dilution samples were omitted. The laboratory should be warned of such omissions. They are required elements of an ASP data package. Data has been evaluated based on the information that was provided.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be

guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

mes B. Baldwin

\_ Date: 02Avg12

### DATA QUALIFICATIONS

COVANTA RECOVERY SITE

2012	
Mav	
pled	
Samp	

		SPIKES	SPIKE	DUPE	DUPES	DUPES	DUPES
C4R-MW-01-6'-8'	(12:2251-01)	7.3500	38607	5.917	4.473	6753	10.23
C4R-MW-02-2'-6'	(12:2251-02)	6.8205	9317	3.083	3.723	1287	4.723
C4R-MW-03-6'-10'	(12:2251-03)	6.8305	42305	7.245	5,623	6757	8.48J
C4R-MW-05-4'-10'	(12:2251-04)	7.2805	4650J	6.233	5.867	526J	11.13
C4R-MW-06-4'-10'	(12:2251-05)	6.9303	34803	3.28J	6.003	5403	8.803
C4R-MW-05-4'-10'DUP		6.9303	4950J	8.16J	6.573	10601	20.23

### **SECTION 3**

### **MAY 2012 AQUEOUS SAMPLES-SDG 12:2285-2308**

### DATA USABILITY SUMMARY REPORT

### **COVANTA RECOVERY SITE**

### **AQUEOUS SAMPLES COLLECTED MAY 2012**

SDG 12:2285, 12:2308
Volatile Organics, Semivolatile Organics
PCB, Metals

Prepared for:

LABELLA ASSOCIATES, P.C.
Olympic Towers
300 Pearl Street, Suite 325
Buffalo, NY 14202

Prepared by:

DATAVAL, Inc. 518 Hooper Rd., PMB 283 Endwell, NY 13760

### **SECTION 3.1**

**Volatiles** 

### DATA USABILITY SUMMARY REPORT

for

LABELLA ASSOCIATES, P.C. 300 Pearl Street, Suite 325 Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2285 - 2308 Sampled May 2012

### VOLATILE ORGANICS

C4R-MW-02	(12:2285-01)	C4R-MW-03	(12:2285-02)
C4R-MW-05	(12:2285-03)	C4R-MW-06	(12:2285-04)
C4R-MW-06DUP	(12:2285-05)	TRIP BLANK	(12:2285-06)
GP-MW-01	(12:2285-07)	GP-MW-02	(12:2285-08)
GP-MW-03	(12:2285-09)	GP-MW-02DUP	(12:2285-10)
MW-A4-1	(12:2308-01)	C4R-MW-01	(12:2308-02)
MW-A19-1	(12:2308-03)		10010000

### DATA ASSESSMENT

A volatile organics data package containing analytical results for twelve aqueous samples and a trip blank was received from Labella Associates, P.C. on 09Aug12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed STARS and Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-24, Rev. #2, August 2008, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B) was used as a technical reference.

With the exception of the concentration reported from C4R-MW-01, acetone should be interpreted as undetected in this group of samples. Acetone concentrations, when present, are assumed to represent laboratory artifacts. The result from C4R-MW-01 has been qualified as an estimation.

The positive acetone results reported from this project have been qualified as estimations due to poor calibration performance. The trichloroethene result from each sample has been similarly qualified.

The positive results from C4R-MW-05, C4R-MW-06, C4R-MW-06DUP, GP-MW-01 and GP-MW-03 have been qualified as estimations due to high surrogate standard recoveries.

The identification of n-butylbenzene in GP-MW-03 was not conclusive, based on the mass spectra reference included in the raw data. N-butylbenzene should be interpreted as undetected in this sample.

The TIC's reported from MW-A19-1 have been edited, where necessary, to provide more appropriate identifications.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be

guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 16 Avg 12

SAMPLED: May 2012

## COVANTA RECOVERY SITE

		BLANK	CALIBRATE	CALIBRATE	SURROGATES	SPECTRA ID	MS ID	
							24	1
C4R-MW-02	12:2285-01)		16,405	2.005				
C4R-MW-03	(12:2285-02)	•	30,000	2.003				
C4R-MW-05	(12:2285-03)	15.00	15,003	2.003				
C4R-MM-06	(12:2285-	44.70	44.703	2.003				
C4R-MM-06DUP	P(12:2285-05)	44.30	44.303	2.005	ALL POS J			
GP-MM-01	(12:2285-07)							
GP-MW-02	(12:2285-08)							
GP-MM-03	(12:2285-09)				ALL POS J	2.00		
GP-IMM-02DUP	(12:2285-10)					1		
MW-A4-1	(12:2308-01)			2.003				
C4R-MW-01	(12:2308-02)	164J	164J	2.003				
MW-A19-1	(12:2308-03)	27.0U	27,003	2.005			ROIT	

### **SECTION 3.2**

### **Semivolatiles**

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2285 - 2308 Sampled May 2012

# SEMIVOLATILE ORGANICS

C4R-MW-02	(12:2285-01)	C4R-MW-03	(12:2285-02)
C4R-MW-05	(12:2285-03)	C4R-MW-06	(12:2285-04)
C4R-MW-06DUE	(12:2285-05)	GP-MW-01	(12:2285-07)
GP-MW-02	(12:2285-08)	GP-MW-03	(12:2285-09)
GP-MW-02DUP	(12:2285-10)	MW-A4-1	(12:2308-01)
C4R-MW-01	(12:2308-02)	MW-A19-1	(12:2308-03)

A semivolatile organics data package containing analytical results for twelve aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for Analyses, performed according to SW-846 Method 8270, addressed Target Compound List and STARS list analytes. tory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-#4, August 2008, Validating Semivolatile Organic Compounds by Gas Chromatography / Mass Spectrometry SW-846 Method 8270D was used as a technical reference.

A TIC eluting at 17.94 minutes (triphenylphosphine oxide) has been removed from the reports of C4R-MW-02, C4R-MW-03, C4R-MW-05, C4R-MW-06 and C4R-MW-06DUP because it is assumed to represent a laboratory artifact.

The indeno(1,2,3-cd)pyrene, 2-chloronaphthalene and atrazine results from this project have been qualified as estimations due to poor calibration performance.

The results reported from GP-MW-02 have been qualified as estimations due to low internal standard recoveries.

The 4-nitrophenol results from this project have been qualified as estimations due to low matrix spike recoveries. It is noted that the result from MW-4A-1 has been left unqualified.

Where necessary, the TIC's reported from this project have been edited to provide more appropriate identifications.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data

assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 16 Avg 12

# SUMMARY OF QUALIFIED DATA

SAMPLED: May 2012

COVANTA RECOVERY SITE

	ſ											
MS ID	EDIT	EDIT	FUT	i i	RNTT	1					FILT	EDIT
SPIKES 4-NITPHEN	250J	250J	2507	2503	250.7	) ) )					250.7	2503
INT SED							ALL UJ					
CALIBRATE ATRAZINE	1007	1003	1001	1001	1001					1001	1007	1000
LIBRATE CALIBRATE (123CD) PYR 2-CLNAPH	1001	1001	1001	1007	1007					1003	1003	1001
CALIBRATE IND (123CD) PY	1001	1001	1001	1001	1003	1003	1007	1001	1007	1007	1007	1001
BLANK TIC PPO	REMOVE	REMOVE	REMOVE	REMOVE	REMOVE							
	2:2285-	$\{12:2285-02\}$	(12:2285-03)	22	P(12:2285-05)	(12:2285-07)	$^{\circ}$	(12:2285-09)	(12:2285-10)	(12:2308-01)	(12:2308-02)	(12:2308-03)
	C4R-MW-02	C4R-MW-03	C4R-MW-05	C4R-MW-06	C4R-MW-06DUP	GP-MW-01	GP-MW-02	GP-MW-03	GP-MW-02DUP	MW-A4-1	C4R-MW-01	MW-A19-1

# **SECTION 3.3**

**PCBs** 

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2285 - 2308 Sampled May 2012

# PCB

C4R-MW-02	(12:2285-01)	C4R-MW-03	(12:2285-02)
C4R-MW-05	(12:2285-03)	C4R-MW-06	(12:2285-04)
C4R-MW-06DUP	(12:2285-05)	MW-A4-1	(12:2308-01)
C4R-MW-01	(12:2308-02)	MW-A19-1	(12:2308-03)

A PCB data package containing analytical results for eight aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8082, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-45, Rev. #1, October 2006, Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A) was used as a technical reference.

# CORRECTNESS AND USABILITY

Reported data should be considered complete, technically defensible, completely usable, and without qualifications in its present form. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin

Date: KAve 12

# COVANTA RECOVERY SITE

Sampled May 2012

(12:2285-01) (12:2285-02) (12:2285-03) (12:2285-04) (12:2285-05) C4R-MW-02 C4R-MW-03 C4R-MW-05 C4R-MW-06 C4R-MW-06DUP

(12:2308-01) (12:2308-02) (12:2308-03) C4R-MW-01 MW-A4-1

MW-A19-1

# **SECTION 3.4**

**Metals** 

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2285 - 2308 Sampled May 2012

# METALS

C4R-MW-02	(12:2285-01)	C4R-MW-03	(12:2285-02)
C4R-MW-05	(12:2285-03)	C4R-MW-06	(12:2285-04)
C4R-MW-06DUP	(12:2285-05)	MW-A4-1	(12:2308-01)
C4R-MW-01	(12:2308-02)	MW-A19-1	(12:2308-03)

An inorganics data package containing analytical results for eight aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Methods 6010 and 7471 addressed Target Analyte List metals. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOW HW-2, Rev. 13, Sep. 2005, Evaluation of Metals Data for the Contract Laboratory Program) was used as a technical reference.

# CORRECTNESS AND USABILITY

Reported data should be considered technically defensible, completely usable, and without qualifications in its present form. A detailed discussion of the review process follows.

It is noted that the laboratory analyzed interference check standards at the beginning of each ICP sequence, but not at the end of the run as required by ASP protocol. CRDL and serial dilution samples were omitted. The laboratory should be warned of such omissions. They are required elements of an ASP data package. Data has been evaluated based on the information that was provided.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: 16 Avg 12

Sampled May 2012

(12:2285-01) (12:2285-02) (12:2285-03) (12:2285-04) (12:2285-05) (12:2308-01) (12:2308-02) (12:2308-02) C4R-MW-06DUP C4R-MW-03 C4R-MW-05 C4R-MW-06 C4R-MW-01 C4R-MW-02 MW-A4-1

MW-A19-1

# **SECTION 4**

# JUNE 2012 AQUEOUS SAMPLES-SDG 12:2354

# COVANTA RECOVERY SITE

# AQUEOUS SAMPLES COLLECTED JUNE 2012

SDG 12:2354 Volatile Organics, Semivolatile Organics Pesticides, PCB, Metals

Prepared for:

LABELLA ASSOCIATES, P.C.
Olympic Towers
300 Pearl Street, Suite 325
Buffalo, NY 14202

Prepared by:

DATAVAL, Inc. 518 Hooper Rd., PMB 283 Endwell, NY 13760

# **SECTION 4.1**

**Volatiles** 

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2354 Sampled June 2012

# VOLATILE ORGANICS

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3) TRIP BLANK (12:2354-4)

A volatile organics data package containing analytical results for three aqueous samples and a trip blank was received from Labella Associates, P.C. on 09Aug12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8260, addressed STARS and Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-24, Rev. #2, August 2008, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B) was used as a technical reference.

The trichloroethene results reported from this project have been qualified as estimations due to poor calibration performance.

# CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Results representing a usable estimation of the conditions at the time of sampling have been flagged "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin

Date: 15AUG12

# SUNMARY OF QUALIFIED DATA

SAMPLED: June 2012

COVANTA RECOVERY SITE

CALIBRATE TCE

(12;2354-1) (12;2354-2) (12:2354-3) C4R-MH-01 C4R-MH-03 C4R-MH-02

2.00J 2.00J 2.00J

# **SECTION 4.2**

# **Semivolatiles**

for

LABELLA ASSOCIATES, P.C.
300 Pearl Street, Suite 325
Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2354 Sampled June 2012

# SEMIVOLATILE ORGANICS

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3)

A semivolatile organics data package containing analytical results for three aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for Analyses, performed according to SW-846 Method 8270, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-22, Rev. #4, August 2008, Validating Semivolatile Organic Compounds by Gas Chromatography / Mass Spectrometry SW-846 Method 8270D was used as a technical reference.

indeno(1,2,3-cd)pyrene, 2-chloronaphthalene and results from this project have been qualified as estimations due to poor calibration performance.

One of the TIC's reported from C4R-MH-02 has been edited to provide a more appropriate identification.

### CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be quaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin

Date: 15 Aug 12

# SUMMARY OF QUALIFIED DATA

SAMPLED: June 2012				
	MS ID			EDIT
	CALIBRATE ATRAZINE	1003	1007	1001
	CALIBRATE 2-CLNAPH	1007	1007	1001
	CALIBRATE IND (123CD) PYR	1000	1007	1001
COVANTA RECOVERY SITE		(12:2354-1)	(12:2354-2)	(12:2354-3)
COVANTA RE			C4R-MH-03	C4R-MH-02

# **SECTION 4.3**

# **Pesticides**

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325
Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2354 Sampled June 2012

# PESTICIDES

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3)

A Pesticide data package containing analytical results for three aqueous samples was received from Labella Associates on 09Aug12. The ASP Category B deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8081, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-44, Rev. #1, October 2006, Validating Pesticide Compounds by Gas Chromatography SW-846 Method 8081B was used as a technical reference.

The pesticide results from this group of samples have been qualified as estimations because the analytical sequence was not terminated with a calibration check standard.

# CORRECTNESS AND USABILITY

Reported data should be considered technically defensible and completely usable in its present form. Data presenting a usable estimation of the conditions being measured has been flagged "J" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin

Date: 15AUG12

# DATA QUALIFICATIONS

COVANTA RECOVERY SITE

SAMPLED; June 2012

CALIBRATE d-BHC	0.1093
CALIBRATE a-BHC	0,1115
CALIBRATE	ALL UJ ALL UJ ALL J/UJ
	(12:2354-1) (12:2354-2) (12:2354-3)
	C4R-MH-01 (12:2354-7 C4R-MH-2 (12:2354-7 C4R-MH-03 (12:2354-7

# **SECTION 4.4**

**PCBs** 

for

LABELLA ASSOCIATES, P.C. 300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2354 Sampled June 2012

PCB

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3)

A PCB data package containing analytical results for three aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Method 8082, addressed Target Compound List analytes. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Guidelines Functional (SOP HW-45, Rev. #1, October Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A) was used as a technical reference.

# CORRECTNESS AND USABILITY

Reported data should be considered complete, technically defensible, completely usable, and without qualifications in its present form. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

James B. Baldwin

Date: 15AVG12

# DATA QUALIFICATIONS

COVANTA RECOVERY SITE

Sampled June 2012

(12:2354-1) (12:2354-2) (12:2354-3) C4R-MH-01 ( C4R-MH-03 ( C4R-MH-02 (

# **SECTION 4.5**

**Metals** 

for

LABELLA ASSOCIATES, P.C.

300 Pearl Street, Suite 325

Buffalo, NY 14202

COVANTA RECOVERY SITE Aqueous Samples SDG: 12:2354 Sampled June 2012

### METALS

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3)

An inorganics data package containing analytical results for three aqueous samples was received from Labella Associates, P.C. on 09Aug12. The ASP deliverables package included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Covanta Recovery site, were identified by Chain of Custody documents and traceable through the work of Paradigm Environmental Services, the laboratory contracted for analysis. Analyses, performed according to SW-846 Methods 6010 and 7471 addressed Target Analyte List metals. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOW HW-2, Rev. 13, Sep. 2005, Evaluation of Metals Data for the Contract Laboratory Program) was used as a technical reference.

# CORRECTNESS AND USABILITY

Reported data should be considered technically defensible, completely usable, and without qualifications in its present form. A detailed discussion of the review process follows.

It is noted that the laboratory analyzed interference check standards at the beginning of each ICP sequence, but not at the end of the run as required by ASP protocol. CRDL and serial dilution samples were omitted. The laboratory should be warned of such omissions. They are required elements of an ASP data package. Data has been evaluated based on the information that was provided.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data However, DATAVAL, Inc. does not warrant any assessment. interpretation or utilization of this data by a third party.

Reviewer's signature: James B. Baldwin Date: ISAUG-12

Sampled June 2012

C4R-MH-01 (12:2354-1) C4R-MH-03 (12:2354-2) C4R-MH-02 (12:2354-3)