WASTE MANAGEMENT

CWM CHEMICAL SERVICES, LLC
1550 Balmer Road
Model City, NY 14107
716 286 1550
716 286 0211 Fax

March 6, 2014

Mr. Alfred Carlacci, P.E.
New York State Department of
Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915

Re: Air State Facility Permit Application - Supplemental Information

Dear Mr. Carlacci:

On January 8, 2014, CWM Chemical Services, LLC, (CWM), submitted a 6 NYCRR Part 201 Air State Facility Permit Application for the Model City Facility to the New York State Department of Environmental Conservation (NYSDEC). Due to the changes to 6NYCRR Part 201 that became effective on February 22, 2013, the NYSDEC determined that an Air State Facility permit is required for the CWM Chemical Services, LLC. (CWM), Model City Facility as stated in a letter dated March 11, 2013. Attached please find Supplemental Information related to the Air State Facility Permit Application as requested by the NYSDEC, prepared by Conestoga-Rovers & Associates, Inc. (CRA).

Please call Mr. Jonathan Rizzo at (716) 286-0354 or myself at (716) 286-0246 if you require additional information or if you have any questions or comments.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,
CWM CHEMICAL SERVICES, LLC

Jill A. Banaszak
Technical Manager
Model City Facility

JPR/JAB/jpr
Attachment

cc:

D. Denk	- NYSDEC/Region 9
D. Weiss	- NYSDEC/Region 9
P. Grasso	- NYSDEC/Region 9
B. Rostami	- NYSDEC/Region 9
On-site Monitors	- NYSDEC/Model City
C. Laport	- NYSDEC/Region 9
A. Zylinski	- NYSDEC/Region 9
M. Cruden	- NYSDEC/Albany, NY
M. Mortefolio	- NYSDEC/Albany, NY
A. Park	- USEPA/Region II
P. Flax	- USEPA/Region II
N. Azzam	- USEPA/Region II
J. Devald	- NCHD/Lockport, NY
M. Mahar	- CWM/Model City, NY
J. Rizzo	- CWM/Model City, NY
EMD Subject File	
Q & A	

CONESTOGA-ROVERS
& ASSOCIATES

2055 Niagara Falls Boulevard, Suite 3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

March 4, 2014 Reference No. 080335

Ms. Jill Banaszak
CWM Chemical Services, LLC
1550 Balmer Road
Box 200
Model City, NY 14107

Dear Ms. Banaszak:

Re: Supplement to January 2014 Air State Facility Permit Application
CWM Chemical Services, LLC Model City Facility

CWM Chemical Services, LLC (CWM) has requested that Conestoga-Rovers & Associates, Inc. (CRA) provide a Supplement to the January 2014 Air State Facility Permit Application ("Supplement") for the CWM Model City Facility based on a request for further information from the New York State Department of Environmental Conservation (NYSDEC). This Supplement provides information regarding the sampling work conducted at the CWM Facility on August 23, 2013. In an effort to obtain information regarding emissions of pesticides, polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) from the SLF 1-6 landfill area, CRA tested five standpipes connected to the SLF 1-6 leachate collection system on August 3, 2013. Presented in this document are the sampling methodology, the analytical laboratory results and a description of any derived emission factors used for the January 2014 Air State Facility Permit Application.

The leachate collection system in the SLF 1-6 landfill area contains a total of twenty-five standpipes. Based on a review of historical data and CWM knowledge, CRA and CWM elected to sample from the following standpipes as worst case of the twenty-five standpipes:

- PW-4
- PW-6
- PW-13
- PW-18
- PW-25

Figure 1 provides the locations of each of the standpipes listed above.

Pesticides and PCBs were sampled and analyzed in accordance with the procedures outlined in the USEPA Method TO-10A: Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using Low Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/ Multi-Detector Detection (GC/MD). PAHs were sampled and analyzed in accordance with the procedures outlined in

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the USEPA Method TO-13A Modified (Modified for Low-flow conditions): Determination of Polycyclic Aromatic Hydrocarbons (PAH) in Ambient Air Using Gas Chromatography/Mass Spectrometry (GC/MS). Prior to the sampling work, the laboratory provided cartridges containing a foam/resin material used to absorb the sample (five cartridges were provided for Method TO-10A and five cartridges were provided for Method TO-13A). Each of the cartridges was connected in line with a personal sampling pump designed to operate between 1 and 5 liters per minute. The sampling apparatus was placed above the openings in the covers on each of the five standpipes on the morning of August 23, 2013. An airflow calibrator was used to record a digital flow reading at the start of sample collection and prior to termination of sample collection. The flow readings and sample times for each of the five standpipes are presented in Table 1 of this letter. After sample collection, each of the cartridges was wrapped in aluminum foil and iced in a cooler for shipment to ALS Environmental Laboratory. The full laboratory analytical report for the sampling work is presented in Attachment 1 of this letter. A summary of the results is presented in Table 2 of this letter.

After sampling work was completed, the openings in the covers of each of the 25 standpipes were enhanced by CWM by filling or sealing as a best management practice (BMP) in order to minimize potential air releases.

In order to convert the sampling results, given in terms of concentration units (micrograms per cubic meter), to a mass emission rate, the following equation was utilized:

$$E = C_{\max} * Q * \frac{2.2046\ lb}{kg} * \frac{60\ \text{min}}{hr} * \frac{8{,}760\ \text{hr}}{year} * \frac{kg}{10^9\ \mu g}$$

Where,
E = Emission rate of compound (lb/yr)
C_{max} = Maximum concentration of compound detected out of five standpipes ($\mu g/m^3$)
Q = Air flowrate from standpipes (m^3/min)

A conservative flow rate of 1 m^3/min per standpipe was used since this parameter could not be measured. Emission rates of pesticides, PCBs and PAHs were calculated and are presented in Table 2 of this letter.

Next, the results shown in Table 2 were compared with Tables 3 and 4 of the January 2014 Air State Facility Permit Application. Table 3 of the permit application provides the estimated emission rate for aqueous leachate while Table 4 provides the estimated emission rate for the Light Non-Aqueous Phase Liquid of leachate. Based on a comparison of these results, CRA estimated the evaporation rate of light

CONESTOGA-ROVERS & ASSOCIATES

non-aqueous phase liquids (LNAPL) in Table 4 to be less than 1 percent. This comparison is summarized in attached Table 3.

The sampling and analysis activity performed in August 2013 detected between 17 and 22 percent of the estimated emissions. Therefore, the more conservative estimated emissions rates were used in the January 2014 Air State Facility Permit Application.

We appreciate your time and consideration in this matter. Please feel free to contact us if you have any questions or if you would like clarification or additional information. We will quickly respond to any questions you have and we appreciate your timely review.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Steven D. Wilsey
Project Manager

SDW/cs/1

Encl.

TABLE 1

FIELD DATA READINGS: AUGUST 23, 2013 SAMPLING
CWM CHEMICAL SERVICES, LLC

Pre-Calibration Data

Location	*Method*	*Pump Serial Number*	*Design Flow (L/min)*	*Trial #1 (L/min)*	*Trial #2 (L/min)*	*Trial #3 (L/min)*	*Average (L/min)*
PW-4	TO-10A	IE B18735B	1-5	2.729	2.734	2.758	2.740
	TO-13A Mod	IE B20303B	1-5	2.859	2.833	2.828	2.840
PW-6	TO-10A	IE B10585B	1-5	2.739	2.748	2.734	2.740
	TO-13A Mod	IE B20298B	1-5	2.793	2.813	2.828	2.811
PW-13	TO-10A	IE B18074B	1-5	2.902	2.913	2.913	2.909
	TO-13A Mod	CRA NF03939	1-5	3.026	3.068	3.038	3.044
PW-18	TO-10A	CRA NF03941	1-5	2.902	2.908	2.844	2.885
	TO-13A Mod	CRA NF03940	1-5	2.897	2.902	2.924	2.908
PW-25	TO-10A	CRA NF03942	1-5	3.111	3.068	3.062	3.080
	TO-13A Mod	CRA NF03943	1-5	2.941	2.974	2.980	2.965

Post-Calibration Data

Location	*Method*	*Pump Serial Number*	*Design Flow (L/min)*	*Trial #1 (L/min)*	*Trial #2 (L/min)*	*Trial #3 (L/min)*	*Average (L/min)*
PW-4	TO-10A	IE B18735B	1-5	2.743	2.763	2.758	2.755
	TO-13A Mod	IE B20303B	1-5	2.969	2.991	2.980	2.980
PW-6	TO-10A	IE B10585B	1-5	2.734	2.715	2.739	2.729
	TO-13A Mod	IE B20298B	1-5	2.891	2.734	2.902	2.842
PW-13	TO-10A	IE B18074B	1-5	2.854	2.849	2.897	2.867
	TO-13A Mod	CRA NF03939	1-5	2.991	2.969	2.974	2.978
PW-18	TO-10A	CRA NF03941	1-5	3.026	3.068	3.032	3.042
	TO-13A Mod	CRA NF03940	1-5	2.808	2.783	2.788	2.793
PW-25	TO-10A	CRA NF03942	1-5	3.021	3.009	3.032	3.021
	TO-13A Mod	CRA NF03943	1-5	2.991	3.021	2.969	2.994

TABLE 1

FIELD DATA READINGS: AUGUST 23, 2013 SAMPLING
CWM CHEMICAL SERVICES, LLC

Average Totals

Location	*Method*	*Pump Serial Number*	*Design Flow (L/min)*	*Average (L/min)*	*Sample Time (min)*	*Sample Volume (L)*
PW-4	TO-10A	IE B18735B	1-5	2.748	589	1,618
	TO-13A Mod	IE B20303B	1-5	2.910	589	1,714
PW-6	TO-10A	IE B10585B	1-5	2.735	572	1,564
	TO-13A Mod	IE B20298B	1-5	2.827	572	1,617
PW-13	TO-10A	IE B18074B	1-5	2.888	567	1,637
	TO-13A Mod	CRA NF03939	1-5	3.011	567	1,707
PW-18	TO-10A	CRA NF03941	1-5	2.963	564	1,671
	TO-13A Mod	CRA NF03940	1-5	2.850	564	1,608
PW-25	TO-10A	CRA NF03942	1-5	3.051	561	1,711
	TO-13A Mod	CRA NF03943	1-5	2.979	561	1,671

TABLE 2

CALCULATION OF COMPOUND EMISSION RATES BASED ON SAMPLING RESULTS
CWM CHEMICAL SERVICES, LLC

	Pesticides		
Sample Location	**alpha-BHC ($\mu g/m^3$)**	**gamma-BHC ($\mu g/m^3$)**	**4,4'-DDT ($\mu g/m^3$)**
PW-4	0.031	0.16	0.031
PW-6	0.60	0.43	0.085
PW-13	0.031	0.51	0.045
PW-18	0.030	0.030	0.030
PW-25	0.029	0.029	0.029
Max Concentration (ug/m^3)	0.60	0.51	0.085
Emissions (lb/yr) =	0.017	0.015	0.002

	PCBs	
Sample Location	**Aroclor 1016 ($\mu g/m^3$)**	**Aroclor 1254 ($\mu g/m^3$)**
PW-4	8.1	0.38
PW-6	13	1.4
PW-13	43	2.1
PW-18	2.2	0.32
PW-25	5.3	0.29
Max Concentration (ug/m^3)	43	2.1
Emissions (lb/yr) =	1.25	0.06

	PAHs
Sample Location	**Napthalene ($\mu g/m^3$)**
PW-4	2.9
PW-6	3.1
PW-13	12
PW-18	3.1
PW-25	3.0
Max Concentration (ug/m^3)	12
Emissions (lb/yr) =	0.35

Notes:

ND: Compound not detected above the Method Reporting Limit (MRL)

Assumed Max Flow from 1 standpipe = 1 m^3/min

Maximum result used to calculate emissions

TABLE 3

COMPARISON OF EMISSION RATES BASED ON SAMPLING RESULTS WITH ESTIMATED EMISSION RATES FROM THE JANUARY 2014 AIR STATE FACILITY PERMIT APPLICATION CWM CHEMICAL SERVICES, LLC

Compound	ER_{aq}	ER_{LNAPL}	ER_{App}	ER_{sample}	ER_{sample}/ER_{App}
	(lb/yr)	(lb/yr)	(lb/yr)	(lb/yr)	(%)
Aroclor 1016	---	---	---	1.25	
Aroclor 1242	1.02	4.28	5.3	ND	
Aroclor 1254	0.28	1.46	1.74	0.06	
Aroclor 1260	0.28	---	0.28	ND	
Total PCBs	**1.58**	**5.74**	**7.32**	**1.31**	**18%**
Pentachlorobenzene	0.16	---	0.16	---	
Alpha-BHC	0.0004	---	0.0004	0.017	
Gamma-BHC	---	---	---	0.015	
4,4'-DDT	0.0001	---	0.0001	0.002	
Total Pesticides/Herbicides/Insecticides	**0.16**	**---**	**0.16**	**0.035**	**22%**
Anthracene	---	0.04	0.04	ND	
Bis(2-ethylhexyl)phthalate	---	0.76	0.76	---	
Napthalene	---	1.15	1.15	0.35	
Phenanthrene	---	0.1	0.1	ND	
Total POM	**---**	**2.05**	**2.05**	**0.35**	**17%**

Abbreviation Notes:

1. ERaq represents the compound emission rate from Table 3 of the January 2014 Air Permit Application.
2. ERLNAPL represents the compound emission rate from Table 4 of the January 2014 Air Permit Application assuming a volatilization rate of 1%.
3. ERApp represents the sum of ER aq and ERLNAPL from the January 2014 Air Permit Application.
4. ERsample represents the compound emission rate using the methodology given in this Supplement to the January 2014 Air Permit Application, based on sampling results from August 23, 2013.

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LABORATORY REPORT

September 12, 2013

Susan Scrocchi
Conestoga-Rovers & Associates, Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, NY 14304

RE: CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335

Dear Susan:

Enclosed are the results of the samples submitted to our laboratory on August 27, 2013. For your reference, these analyses have been assigned our service request number P1303786.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 4:47 pm, Sep 12, 2013

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
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Client: Conestoga-Rovers & Associates, Inc. Service Request No: P1303786
Project: CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335 New York Lab ID: 11221

CASE NARRATIVE

The samples were received intact under chain of custody on August 27, 2013 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Pesticide/Aroclors Analysis

The samples were extracted and analyzed for pesticides/aroclors in accordance with EPA Method TO-10A. An aliquot of each extract was injected into a gas chromatograph with dual electron capture detectors (GC/ECD). This method is not included on the laboratory's DoD-ELAP or AIHA-LAP scope of accreditation. Any analytes flagged with an X are not included on the laboratory's NELAP scope of accreditation.

The minimum criterion for delt-BHC, endrin, endosulfan II, endrin aldehyde, methoxychlor, and endrin ketone pesticides was not met in the opening Continuing Calibration Verification (CCV) analyzed on September 4, 2013. In accordance with ALS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analytes of concern was analyzed each day of analysis. The MRL check standard verified that instrument sensitivity was adequate to detect the analytes at the MRL on the day of analysis. In addition, subsequent CCVs analyzed within the sequence on September 4, 2013 met the minimum criteria with the exception of endrin ketone. Because the sensitivity was shown to be adequate to detect the compounds in question and the compounds were not detected in the field samples, the data quality is not significantly affected. This procedure is a quantitative confirmation of non-detect results at or below the MRL. No further corrective action was necessary.

Sample extraction was performed at the laboratory's off-site extraction facility located at 2360 Shasta Way, Suite G, Simi Valley, CA 93065.

Polynuclear Aromatic Hydrocarbon Analysis

The low volume PUF/XAD-2 samples were analyzed for polynuclear aromatic hydrocarbons (PAHs). The extracts were analyzed according to the methodology outlined in EPA Method TO-13A using combined gas chromatography/mass spectrometry (GC/MS). However, the method was modified for the use of the low volume PUF/XAD-2 sample collection materials. This method is not included on the laboratory's DoD-ELAP or AIHA-LAP scope of accreditation.

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Client: Conestoga-Rovers & Associates, Inc. Service Request No: P1303786
Project: CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335 New York Lab ID: 11221

CASE NARRATIVE

NELAC requirements for compliance with EPA TO-13A state a duplicate sample must be analyzed. However, this is dependent upon the client submitting a secondary sample for extraction and analysis. Sample extraction was performed at the laboratory's off-site extraction facility located at 2360 Shasta Way, Suite G, Simi Valley, CA 93065.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

Certifications, Accreditations, and Registrations

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L11-203
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2012039
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	494864
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-13-4
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272013-3
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Conestoga-Rovers & Associates, Inc. Service Request: P1303786

Project ID: CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335

Date Received: 8/27/2013

Time Received: 09:25

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	TO-10A - PCB Low Vol	TO-10A - PEST Low Vol	TO-13A Modified - PAH SIM Low Vol
080335-082313-PW04A	P1303786-001	Air	8/23/2013	16:50	X	X	
080335-082313-PW04B	P1303786-002	Air	8/23/2013	16:50			X
080335-082313-PW06A	P1303786-003	Air	8/23/2013	16:58	X	X	
080335-082313-PW06B	P1303786-004	Air	8/23/2013	16:58			X
080335-082313-PW13A	P1303786-005	Air	8/23/2013	17:06	X	X	
080335-082313-PW13B	P1303786-006	Air	8/23/2013	17:06			X
080335-082313-PW18A	P1303786-007	Air	8/23/2013	17:13	X	X	
080335-082313-PW18B	P1303786-008	Air	8/23/2013	17:13			X
080335-082313-PW25A	P1303786-009	Air	8/23/2013	17:21	X	X	
080335-082313-PW25B	P1303786-010	Air	8/23/2013	17:21			X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No: P1303786

Company Name & Address (Reporting Information): CRA
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, NY 14304

Project Name: CWM Model City - Sampling of PCBs/Pesticides/PAHs

Project Number: 080335

Project Manager: Steven D. Wilsey

P.O. # / Billing Information: Order # 42204

Phone: (716) 297-6150 Fax: (716) 297-2265

Email Address for Result Reporting: swilsey@craworld.com / bszalda@craworld.com

Sampler (Print & Sign): Bryan P. Szalda

ALS Contact: Sue Anderson

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume (L)	Analysis Method: TO-10A	Analysis Method: TO-13A Modified	Comments e.g. Actual Preservative or specific instructions
080335-082313-PW04A	1	8/23/13	1650	L-117	—	—	—	1,618	X		
080335-082313-PW04B	2	8/23/13	1650	LX-33	—	—	—	1,714		X	
080335-082313-PW06A	3	8/23/13	1658	L-64	—	—	—	1,564	X		
080335-082313-PW06B	4	8/23/13	1658	LX-40	—	—	—	1,617		X	
080335-082313-PW13A	5	8/23/13	1706	L-106	—	—	—	1,637	X		
080335-082313-PW13B	6	8/23/13	1706	LX-2	—	—	—	1,707		X	
080335-082313-PW18A	7	8/23/13	1713	L-65	—	—	—	1,671	X		
080335-082313-PW18B	8	8/23/13	1713	LX-38	—	—	—	1,608		X	
080335-082313-PW25A	9	8/23/13	1721	L-35	—	—	—	1,711	X		
080335-082313-PW25B	10	8/23/13	1721	LX-1	—	—	—	1,671		X	

Report Tier Levels - please select
Tier I - Results (Default in not specified) _____ Tier III (Results + QC & Calibration Summaries) _____
Tier II (Results + QC Summaries _____ Tier IV (Date Validation Package) 10% Surcharge _____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Bryan P. Szalda	8/26/13	1615	[signature]	8/27/13	0915
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature 4 °C

6 of 31

ALS Environmental

Sample Acceptance Check Form

Client: Conestoga-Rovers & Associates, Incorporated Work order: P1303786

Project: CWM Model City - Sampling of PCBs/Pesticides/PAHs/080335

Sample(s) received on: 8/27/13 Date opened: 8/27/13 by: MZAMORA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 4° C Blank Temperature: ° C **Gel Packs**			
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1303786-001.01	PUF (Low Vol)					
P1303786-002.01	PUF/XAD-2 (Low Vol)					
P1303786-003.01	PUF (Low Vol)					
P1303786-004.01	PUF/XAD-2 (Low Vol)					
P1303786-005.01	PUF (Low Vol)					
P1303786-006.01	PUF/XAD-2 (Low Vol)					
P1303786-007.01	PUF (Low Vol)					
P1303786-008.01	PUF/XAD-2 (Low Vol)					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS Environmental

Sample Acceptance Check Form

Client: Conestoga-Rovers & Associates, Incorporated Work order: P1303786

Project: CWM Model City - Sampling of PCBs/Pesticides/PAHs/080335

Sample(s) received on: 8/27/13 Date opened: 8/27/13 by: MZAMORA

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1303786-009.01	PUF (Low Vol)					
P1303786-010.01	PUF/XAD-2 (Low Vol)					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW04A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-001

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.618 m^3
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m^3	MRL µg/m^3	Data Qualifier
319-84-6	alpha-BHC	ND	50	ND	0.031	
58-89-9	gamma-BHC	**250**	50	**0.16**	0.031	**P**
319-85-7	beta-BHC	ND	50	ND	0.031	
319-86-8	delta-BHC	ND	50	ND	0.031	**V**
76-44-8	Heptachlor	ND	50	ND	0.031	
309-00-2	Aldrin	ND	50	ND	0.031	
1024-57-3	Heptachlor Epoxide	ND	50	ND	0.031	
12789-03-6	gamma-Chlordane	ND	50	ND	0.031	
5103-71-9	alpha-Chlordane	ND	50	ND	0.031	
72-55-9	4,4'-DDE	ND	50	ND	0.031	
959-98-8	Endosulfan I	ND	50	ND	0.031	
60-57-1	Dieldrin	ND	50	ND	0.031	
72-20-8	Endrin	ND	50	ND	0.031	**V**
72-54-8	4,4'-DDD	ND	50	ND	0.031	
33213-65-9	Endosulfan II	ND	50	ND	0.031	**V**
50-29-3	4,4'-DDT	ND	50	ND	0.031	
7421-93-4	Endrin Aldehyde	ND	50	ND	0.031	**V**
72-43-5	Methoxychlor	ND	50	ND	0.031	**V**
1031-07-8	Endosulfan Sulfate	ND	50	ND	0.031	
53494-70-5	Endrin Ketone	ND	50	ND	0.031	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
P = The confirmation criterion was exceeded. The relative percent difference was greater than 40% between the two analytical results.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW06A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-003

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.564 m^3
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m^3	MRL µg/m^3	Data Qualifier
319-84-6	alpha-BHC	**940**	50	**0.60**	0.032	
58-89-9	gamma-BHC	**680**	50	**0.43**	0.032	**P**
319-85-7	beta-BHC	ND	50	ND	0.032	
319-86-8	delta-BHC	ND	50	ND	0.032	**V**
76-44-8	Heptachlor	ND	50	ND	0.032	
309-00-2	Aldrin	ND	50	ND	0.032	
1024-57-3	Heptachlor Epoxide	ND	50	ND	0.032	
12789-03-6	gamma-Chlordane	ND	50	ND	0.032	
5103-71-9	alpha-Chlordane	ND	50	ND	0.032	
72-55-9	4,4'-DDE	ND	50	ND	0.032	
959-98-8	Endosulfan I	ND	50	ND	0.032	
60-57-1	Dieldrin	ND	50	ND	0.032	
72-20-8	Endrin	ND	50	ND	0.032	**V**
72-54-8	4,4'-DDD	ND	50	ND	0.032	
33213-65-9	Endosulfan II	ND	50	ND	0.032	**V**
50-29-3	4,4'-DDT	**130**	50	**0.085**	0.032	**P**
7421-93-4	Endrin Aldehyde	ND	50	ND	0.032	**V**
72-43-5	Methoxychlor	ND	50	ND	0.032	**V**
1031-07-8	Endosulfan Sulfate	ND	50	ND	0.032	
53494-70-5	Endrin Ketone	ND	50	ND	0.032	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
P = The confirmation criterion was exceeded. The relative percent difference was greater than 40% between the two analytical results.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW13A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-005

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.637 m^3
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m^3	MRL µg/m^3	Data Qualifier
319-84-6	alpha-BHC	ND	50	ND	0.031	
58-89-9	gamma-BHC	**830**	50	**0.51**	0.031	**P**
319-85-7	beta-BHC	ND	50	ND	0.031	
319-86-8	delta-BHC	ND	50	ND	0.031	**V**
76-44-8	Heptachlor	ND	50	ND	0.031	
309-00-2	Aldrin	ND	50	ND	0.031	
1024-57-3	Heptachlor Epoxide	ND	50	ND	0.031	
12789-03-6	gamma-Chlordane	ND	50	ND	0.031	
5103-71-9	alpha-Chlordane	ND	50	ND	0.031	
72-55-9	4,4'-DDE	ND	50	ND	0.031	
959-98-8	Endosulfan I	ND	50	ND	0.031	
60-57-1	Dieldrin	ND	50	ND	0.031	
72-20-8	Endrin	ND	50	ND	0.031	**V**
72-54-8	4,4'-DDD	ND	50	ND	0.031	
33213-65-9	Endosulfan II	ND	50	ND	0.031	**V**
50-29-3	4,4'-DDT	**74**	50	**0.045**	0.031	
7421-93-4	Endrin Aldehyde	ND	50	ND	0.031	**V**
72-43-5	Methoxychlor	ND	50	ND	0.031	**V**
1031-07-8	Endosulfan Sulfate	ND	50	ND	0.031	
53494-70-5	Endrin Ketone	ND	50	ND	0.031	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
P = The confirmation criterion was exceeded. The relative percent difference was greater than 40% between the two analytical results.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW18A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-007

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.671 m^3
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m^3	MRL µg/m^3	Data Qualifier
319-84-6	alpha-BHC	ND	50	ND	0.030	
58-89-9	gamma-BHC	ND	50	ND	0.030	
319-85-7	beta-BHC	ND	50	ND	0.030	
319-86-8	delta-BHC	ND	50	ND	0.030	**V**
76-44-8	Heptachlor	ND	50	ND	0.030	
309-00-2	Aldrin	ND	50	ND	0.030	
1024-57-3	Heptachlor Epoxide	ND	50	ND	0.030	
12789-03-6	gamma-Chlordane	ND	50	ND	0.030	
5103-71-9	alpha-Chlordane	ND	50	ND	0.030	
72-55-9	4,4'-DDE	ND	50	ND	0.030	
959-98-8	Endosulfan I	ND	50	ND	0.030	
60-57-1	Dieldrin	ND	50	ND	0.030	
72-20-8	Endrin	ND	50	ND	0.030	**V**
72-54-8	4,4'-DDD	ND	50	ND	0.030	
33213-65-9	Endosulfan II	ND	50	ND	0.030	**V**
50-29-3	4,4'-DDT	ND	50	ND	0.030	
7421-93-4	Endrin Aldehyde	ND	50	ND	0.030	**V**
72-43-5	Methoxychlor	ND	50	ND	0.030	**V**
1031-07-8	Endosulfan Sulfate	ND	50	ND	0.030	
53494-70-5	Endrin Ketone	ND	50	ND	0.030	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW25A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-009

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.711 m^3
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m^3	MRL µg/m^3	Data Qualifier
319-84-6	alpha-BHC	ND	50	ND	0.029	
58-89-9	gamma-BHC	ND	50	ND	0.029	
319-85-7	beta-BHC	ND	50	ND	0.029	
319-86-8	delta-BHC	ND	50	ND	0.029	**V**
76-44-8	Heptachlor	ND	50	ND	0.029	
309-00-2	Aldrin	ND	50	ND	0.029	
1024-57-3	Heptachlor Epoxide	ND	50	ND	0.029	
12789-03-6	gamma-Chlordane	ND	50	ND	0.029	
5103-71-9	alpha-Chlordane	ND	50	ND	0.029	
72-55-9	4,4'-DDE	ND	50	ND	0.029	
959-98-8	Endosulfan I	ND	50	ND	0.029	
60-57-1	Dieldrin	ND	50	ND	0.029	
72-20-8	Endrin	ND	50	ND	0.029	**V**
72-54-8	4,4'-DDD	ND	50	ND	0.029	
33213-65-9	Endosulfan II	ND	50	ND	0.029	**V**
50-29-3	4,4'-DDT	ND	50	ND	0.029	
7421-93-4	Endrin Aldehyde	ND	50	ND	0.029	**V**
72-43-5	Methoxychlor	ND	50	ND	0.029	**V**
1031-07-8	Endosulfan Sulfate	ND	50	ND	0.029	
53494-70-5	Endrin Ketone	ND	50	ND	0.029	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-MB

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: NA
Date Received: NA
Date Extracted: 8/28/13
Date Analyzed: 9/04/13
Volume Sampled: NA m³
Final Extract Volume: 10 ml

CAS #	Compound	Result ng/Sample	MRL ng/Sample	Result µg/m³	MRL µg/m³	Data Qualifier
319-84-6	alpha-BHC	ND	50	NA	NA	
58-89-9	gamma-BHC	ND	50	NA	NA	
319-85-7	beta-BHC	ND	50	NA	NA	
319-86-8	delta-BHC	ND	50	NA	NA	**V**
76-44-8	Heptachlor	ND	50	NA	NA	
309-00-2	Aldrin	ND	50	NA	NA	
1024-57-3	Heptachlor Epoxide	ND	50	NA	NA	
12789-03-6	gamma-Chlordane	ND	50	NA	NA	
5103-71-9	alpha-Chlordane	ND	50	NA	NA	
72-55-9	4,4'-DDE	ND	50	NA	NA	
959-98-8	Endosulfan I	ND	50	NA	NA	
60-57-1	Dieldrin	ND	50	NA	NA	
72-20-8	Endrin	ND	50	NA	NA	**V**
72-54-8	4,4'-DDD	ND	50	NA	NA	
33213-65-9	Endosulfan II	ND	50	NA	NA	**V**
50-29-3	4,4'-DDT	ND	50	NA	NA	
7421-93-4	Endrin Aldehyde	ND	50	NA	NA	**V**
72-43-5	Methoxychlor	ND	50	NA	NA	**V**
1031-07-8	Endosulfan Sulfate	ND	50	NA	NA	
53494-70-5	Endrin Ketone	ND	50	NA	NA	**V**

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable.
V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Project ID: P1303786

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge(s)
Test Notes:

Date(s) Collected: 8/23/13
Date(s) Received: 8/27/13
Date(s) Extracted: 8/28/13
Date(s) Analyzed: 9/4/13

Client Sample ID	ALS Sample ID	2,4,5,6-Tetrachloro-m-Xylene % Recovered	Acceptance Limits	Decachlorobiphenyl % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P130828-MB	**78**	60-120	**89**	60-120	
Lab Control Sample	P130828-LCS	**79**	60-120	**102**	60-120	
Duplicate Lab Control Sample	P130828-DLCS	**79**	60-120	**99**	60-120	
080335-082313-PW04A	P1303786-001	**96**	60-120	**99**	60-120	
080335-082313-PW06A	P1303786-003	**99**	60-120	**107**	60-120	
080335-082313-PW13A	P1303786-005	**85**	60-120	**96**	60-120	
080335-082313-PW18A	P1303786-007	**83**	60-120	**100**	60-120	
080335-082313-PW25A	P1303786-009	**94**	60-120	**96**	60-120	

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-DLCS

Test Code: EPA TO-10A Date Collected: NA
Instrument ID: HP6890/GC6/ECD/ECD Date Received: NA
Analyst: Madeleine Dangazyan Date Extracted: 8/28/13
Sampling Media: PUF (Low Volume) Cartridge Date Analyzed: 9/04/13
Test Notes: Volume(s) Analyzed: NA m^3

CAS #	Compound	Spike Amount LCS / DLCS µg/ml	Result LCS µg/ml	Result DLCS µg/ml	% Recovery LCS	% Recovery DLCS	Project Acceptance Limits	RPD	RPD Limit	Data Qualifier
319-84-6	alpha-BHC	100	85.7	86.0	**86**	**86**	70-130	0	15	
58-89-9	gamma-BHC	100	85.6	86.0	**86**	**86**	70-130	0	15	
319-85-7	beta-BHC	100	83.5	84.2	**84**	**84**	70-130	0	15	
319-86-8	delta-BHC	100	87.6	87.1	**88**	**87**	70-130	1	15	
76-44-8	Heptachlor	100	84.0	85.6	**84**	**86**	70-130	2	15	
309-00-2	Aldrin	100	89.4	88.5	**89**	**89**	70-130	0	15	
1024-57-3	Heptachlor Epoxide	100	88.8	88.0	**89**	**88**	70-130	1	15	
12789-03-6	gamma-Chlordane	100	90.7	89.9	**91**	**90**	70-130	1	15	
5103-71-9	alpha-Chlordane	100	88.9	88.1	**89**	**88**	70-130	1	15	
72-55-9	4,4'-DDE	100	86.5	85.6	**87**	**86**	70-130	1	15	
959-98-8	Endosulfan I	100	88.9	88.3	**89**	**88**	70-130	1	15	
60-57-1	Dieldrin	100	90.9	90.2	**91**	**90**	70-130	1	15	
72-20-8	Endrin	100	101	100	**101**	**100**	70-130	1	15	
72-54-8	4,4'-DDD	100	92.1	92.0	**92**	**92**	70-130	0	15	
33213-65-9	Endosulfan II	100	81.9	82.1	**82**	**82**	70-130	0	15	
50-29-3	4,4'-DDT	100	103	100	**103**	**100**	70-130	3	15	
7421-93-4	Endrin Aldehyde	100	79.5	79.7	**80**	**80**	70-130	0	15	
72-43-5	Methoxychlor	100	98.4	96.3	**98**	**96**	70-130	2	15	
1031-07-8	Endosulfan Sulfate	100	87.3	86.2	**87**	**86**	70-130	1	15	
53494-70-5	Endrin Ketone	100	72.2	71.8	**72**	**72**	70-130	0	15	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW04A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-001

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.618 m³
Final Extract Volume: 10 ml

Dilution Factor: 1.00
Dilution Factor: 2.00

CAS #	Compound	Result ng/Cartridge	MRL ng/Cartridge	Result µg/m³	MRL µg/m³	Data Qualifier
12674-11-2	Aroclor 1016	**13,000**	1,000	**8.1**	0.62	**D**
11104-28-2	Aroclor 1221	ND	500	ND	0.31	**X**
11141-16-5	Aroclor 1232	ND	500	ND	0.31	**X**
53469-21-9	Aroclor 1242	ND	500	ND	0.31	**X**
12672-29-6	Aroclor 1248	ND	500	ND	0.31	**X**
11097-69-1	Aroclor 1254	**620**	500	**0.38**	0.31	**X**
11096-82-5	Aroclor 1260	ND	500	ND	0.31	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
X = See case narrative.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW06A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-003

Test Code:	EPA TO-10A	Date Collected:	8/23/13
Instrument ID:	HP6890/GC6/ECD/ECD	Date Received:	8/27/13
Analyst:	Madeleine Dangazyan	Date Extracted:	8/28/13
Sampling Media:	PUF (Low Volume) Cartridge	Date Analyzed:	9/4/13
Test Notes:		Volume Sampled:	1.564 m^3
		Final Extract Volume:	10 ml

Dilution Factor: 1.00
Dilution Factor: 2.00

CAS #	Compound	Result ng/Cartridge	MRL ng/Cartridge	Result µg/m^3	MRL µg/m^3	Data Qualifier
12674-11-2	Aroclor 1016	**20,000**	1,000	**13**	0.64	**D**
11104-28-2	Aroclor 1221	ND	500	ND	0.32	**X**
11141-16-5	Aroclor 1232	ND	500	ND	0.32	**X**
53469-21-9	Aroclor 1242	ND	500	ND	0.32	**X**
12672-29-6	Aroclor 1248	ND	500	ND	0.32	**X**
11097-69-1	Aroclor 1254	**2,100**	500	**1.4**	0.32	**X**
11096-82-5	Aroclor 1260	ND	500	ND	0.32	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
X = See case narrative.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW13A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-005

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13 & 9/11/13
Volume Sampled: 1.637 m³
Final Extract Volume: 10 ml

Dilution Factor: 1.00
Dilution Factor: 10.0

CAS #	Compound	Result ng/Cartridge	MRL ng/Cartridge	Result µg/m³	MRL µg/m³	Data Qualifier
12674-11-2	Aroclor 1016	**70,000**	5,000	**43**	3.1	**D**
11104-28-2	Aroclor 1221	ND	500	ND	0.31	**X**
11141-16-5	Aroclor 1232	ND	500	ND	0.31	**X**
53469-21-9	Aroclor 1242	ND	500	ND	0.31	**X**
12672-29-6	Aroclor 1248	ND	500	ND	0.31	**X**
11097-69-1	Aroclor 1254	**3,500**	500	**2.1**	0.31	**X**
11096-82-5	Aroclor 1260	ND	500	ND	0.31	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
X = See case narrative.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW18A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-007

Test Code: EPA TO-10A
Instrument ID: HP6890/GC6/ECD/ECD
Analyst: Madeleine Dangazyan
Sampling Media: PUF (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/4/13
Volume Sampled: 1.671 m³
Final Extract Volume: 10 ml

Dilution Factor: 1.00

CAS #	Compound	Result ng/Cartridge	MRL ng/Cartridge	Result µg/m³	MRL µg/m³	Data Qualifier
12674-11-2	Aroclor 1016	**3,700**	500	**2.2**	0.30	
11104-28-2	Aroclor 1221	ND	500	ND	0.30	**X**
11141-16-5	Aroclor 1232	ND	500	ND	0.30	**X**
53469-21-9	Aroclor 1242	ND	500	ND	0.30	**X**
12672-29-6	Aroclor 1248	ND	500	ND	0.30	**X**
11097-69-1	Aroclor 1254	**530**	500	**0.32**	0.30	**X**
11096-82-5	Aroclor 1260	ND	500	ND	0.30	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW25A** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-009

Test Code:	EPA TO-10A	Date Collected:	8/23/13
Instrument ID:	HP6890/GC6/ECD/ECD	Date Received:	8/27/13
Analyst:	Madeleine Dangazyan	Date Extracted:	8/28/13
Sampling Media:	PUF (Low Volume) Cartridge	Date Analyzed:	9/4/13
Test Notes:		Volume Sampled:	1.711 m^3
		Final Extract Volume:	10 ml

Dilution Factor: 1.00

CAS #	Compound	**Result ng/Cartridge**	MRL ng/Cartridge	**Result µg/m³**	MRL µg/m³	Data Qualifier
12674-11-2	Aroclor 1016	**9,000**	500	**5.3**	0.29	
11104-28-2	Aroclor 1221	ND	500	ND	0.29	**X**
11141-16-5	Aroclor 1232	ND	500	ND	0.29	**X**
53469-21-9	Aroclor 1242	ND	500	ND	0.29	**X**
12672-29-6	Aroclor 1248	ND	500	ND	0.29	**X**
11097-69-1	Aroclor 1254	ND	500	ND	0.29	**X**
11096-82-5	Aroclor 1260	ND	500	ND	0.29	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
X = See case narrative.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-MB

Test Code:	EPA TO-10A	Date Collected:	NA
Instrument ID:	HP6890/GC6/ECD/ECD	Date Received:	NA
Analyst:	Madeleine Dangazyan	Date Extracted:	8/28/13
Sampling Media:	PUF (Low Volume) Cartridge	Date Analyzed:	9/4/13
Test Notes:		Volume Sampled:	NA m^3
		Final Extract Volume:	10 ml

Dilution Factor: 1.00

CAS #	Compound	Result ng/Cartridge	MRL ng/Cartridge	Result µg/m^3	MRL µg/m^3	Data Qualifier
12674-11-2	Aroclor 1016	ND	500	NA	NA	
11104-28-2	Aroclor 1221	ND	500	NA	NA	**X**
11141-16-5	Aroclor 1232	ND	500	NA	NA	**X**
53469-21-9	Aroclor 1242	ND	500	NA	NA	**X**
12672-29-6	Aroclor 1248	ND	500	NA	NA	**X**
11097-69-1	Aroclor 1254	ND	500	NA	NA	**X**
11096-82-5	Aroclor 1260	ND	500	NA	NA	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable.
X = See case narrative.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-DLCS

Test Code: EPA TO-10A Date Collected: NA
Instrument ID: HP6890/GC6/ECD/ECD Date Received: NA
Analyst: Madeleine Dangazyan Date Extracted: 8/28/13
Sampling Media: PUF (Low Volume) Cartridge Date Analyzed: 9/04/13
Test Notes: Volume(s) Analyzed: NA m^3

CAS #	Compound	Spike Amount LCS / DLCS ng/ml	Result LCS ng/ml	Result DLCS ng/ml	% Recovery LCS	% Recovery DLCS	Project Acceptance Limits	RPD	RPD Limit	Data Qualifier
12674-11-2	Aroclor 1016	500	482	501	**96**	**100**	70-130	4	15	
11096-82-5	Aroclor 1260	500	469	484	**94**	**97**	70-130	3	15	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW04B** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-002

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/3/13
Final Volume: 1.0 ml
Volume Sampled: 1714 Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	< 5.0	ND	2.9	ND	0.56	
208-96-8	Acenaphthylene	< 0.50	ND	0.29	ND	0.047	
83-32-9	Acenaphthene	< 0.50	ND	0.29	ND	0.046	
86-73-7	Fluorene	< 0.50	ND	0.29	ND	0.043	
85-01-8	Phenanthrene	< 0.50	ND	0.29	ND	0.040	
120-12-7	Anthracene	< 0.50	ND	0.29	ND	0.040	
206-44-0	Fluoranthene	< 0.50	ND	0.29	ND	0.035	
129-00-0	Pyrene	< 0.50	ND	0.29	ND	0.035	
56-55-3	Benz(a)anthracene	< 0.50	ND	0.29	ND	0.031	
218-01-9	Chrysene	< 0.50	ND	0.29	ND	0.031	
205-99-2	Benzo(b)fluoranthene	< 0.50	ND	0.29	ND	0.028	
207-08-9	Benzo(k)fluoranthene	< 0.50	ND	0.29	ND	0.028	
50-32-8	Benzo(a)pyrene	< 0.50	ND	0.29	ND	0.028	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	ND	0.29	ND	0.026	
53-70-3	Dibenz(a,h)anthracene	< 0.50	ND	0.29	ND	0.026	
191-24-2	Benzo(g,h,i)perylene	< 0.50	ND	0.29	ND	0.026	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW06B** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-004

Test Code:	EPA TO-13A Modified	Date Collected:	8/23/13
Instrument ID:	HP 5890II+/HP5972A/MS15	Date Received:	8/27/13
Analyst:	Madeleine Dangazyan	Date Extracted:	8/28/13
Sampling Media:	PUF/XAD-2 (Low Volume) Cartridge	Date Analyzed:	9/3/13
Test Notes:		Final Volume:	1.0 ml
		Volume Sampled:	1617 Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	< 5.0	ND	3.1	ND	0.59	
208-96-8	Acenaphthylene	< 0.50	ND	0.31	ND	0.050	
83-32-9	Acenaphthene	< 0.50	ND	0.31	ND	0.049	
86-73-7	Fluorene	< 0.50	ND	0.31	ND	0.046	
85-01-8	Phenanthrene	< 0.50	ND	0.31	ND	0.042	
120-12-7	Anthracene	< 0.50	ND	0.31	ND	0.042	
206-44-0	Fluoranthene	< 0.50	ND	0.31	ND	0.037	
129-00-0	Pyrene	< 0.50	ND	0.31	ND	0.037	
56-55-3	Benz(a)anthracene	< 0.50	ND	0.31	ND	0.033	
218-01-9	Chrysene	< 0.50	ND	0.31	ND	0.033	
205-99-2	Benzo(b)fluoranthene	< 0.50	ND	0.31	ND	0.030	
207-08-9	Benzo(k)fluoranthene	< 0.50	ND	0.31	ND	0.030	
50-32-8	Benzo(a)pyrene	< 0.50	ND	0.31	ND	0.030	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	ND	0.31	ND	0.027	
53-70-3	Dibenz(a,h)anthracene	< 0.50	ND	0.31	ND	0.027	
191-24-2	Benzo(g,h,i)perylene	< 0.50	ND	0.31	ND	0.027	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW13B** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-006

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/3/13
Final Volume: 1.0 ml
Volume Sampled: 1707 Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	20	**12**	2.9	**2.2**	0.56	
208-96-8	Acenaphthylene	< 0.50	ND	0.29	ND	0.047	
83-32-9	Acenaphthene	< 0.50	ND	0.29	ND	0.046	
86-73-7	Fluorene	< 0.50	ND	0.29	ND	0.043	
85-01-8	Phenanthrene	< 0.50	ND	0.29	ND	0.040	
120-12-7	Anthracene	< 0.50	ND	0.29	ND	0.040	
206-44-0	Fluoranthene	< 0.50	ND	0.29	ND	0.035	
129-00-0	Pyrene	< 0.50	ND	0.29	ND	0.035	
56-55-3	Benz(a)anthracene	< 0.50	ND	0.29	ND	0.031	
218-01-9	Chrysene	< 0.50	ND	0.29	ND	0.031	
205-99-2	Benzo(b)fluoranthene	< 0.50	ND	0.29	ND	0.028	
207-08-9	Benzo(k)fluoranthene	< 0.50	ND	0.29	ND	0.028	
50-32-8	Benzo(a)pyrene	< 0.50	ND	0.29	ND	0.028	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	ND	0.29	ND	0.026	
53-70-3	Dibenz(a,h)anthracene	< 0.50	ND	0.29	ND	0.026	
191-24-2	Benzo(g,h,i)perylene	< 0.50	ND	0.29	ND	0.026	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW18B** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-008

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/3/13
Final Volume: 1.0 ml
Volume Sampled: 1608 Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	< 5.0	ND	3.1	ND	0.59	
208-96-8	Acenaphthylene	< 0.50	ND	0.31	ND	0.050	
83-32-9	Acenaphthene	< 0.50	ND	0.31	ND	0.049	
86-73-7	Fluorene	< 0.50	ND	0.31	ND	0.046	
85-01-8	Phenanthrene	< 0.50	ND	0.31	ND	0.043	
120-12-7	Anthracene	< 0.50	ND	0.31	ND	0.043	
206-44-0	Fluoranthene	< 0.50	ND	0.31	ND	0.038	
129-00-0	Pyrene	< 0.50	ND	0.31	ND	0.038	
56-55-3	Benz(a)anthracene	< 0.50	ND	0.31	ND	0.033	
218-01-9	Chrysene	< 0.50	ND	0.31	ND	0.033	
205-99-2	Benzo(b)fluoranthene	< 0.50	ND	0.31	ND	0.030	
207-08-9	Benzo(k)fluoranthene	< 0.50	ND	0.31	ND	0.030	
50-32-8	Benzo(a)pyrene	< 0.50	ND	0.31	ND	0.030	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	ND	0.31	ND	0.028	
53-70-3	Dibenz(a,h)anthracene	< 0.50	ND	0.31	ND	0.027	
191-24-2	Benzo(g,h,i)perylene	< 0.50	ND	0.31	ND	0.028	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **080335-082313-PW25B** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P1303786-010

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge
Test Notes:

Date Collected: 8/23/13
Date Received: 8/27/13
Date Extracted: 8/28/13
Date Analyzed: 9/3/13
Final Volume: 1.0 ml
Volume Sampled: 1671 Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	< 5.0	ND	3.0	ND	0.57	
208-96-8	Acenaphthylene	< 0.50	ND	0.30	ND	0.048	
83-32-9	Acenaphthene	< 0.50	ND	0.30	ND	0.047	
86-73-7	Fluorene	< 0.50	ND	0.30	ND	0.044	
85-01-8	Phenanthrene	< 0.50	ND	0.30	ND	0.041	
120-12-7	Anthracene	< 0.50	ND	0.30	ND	0.041	
206-44-0	Fluoranthene	< 0.50	ND	0.30	ND	0.036	
129-00-0	Pyrene	< 0.50	ND	0.30	ND	0.036	
56-55-3	Benz(a)anthracene	< 0.50	ND	0.30	ND	0.032	
218-01-9	Chrysene	< 0.50	ND	0.30	ND	0.032	
205-99-2	Benzo(b)fluoranthene	< 0.50	ND	0.30	ND	0.029	
207-08-9	Benzo(k)fluoranthene	< 0.50	ND	0.30	ND	0.029	
50-32-8	Benzo(a)pyrene	< 0.50	ND	0.30	ND	0.029	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	ND	0.30	ND	0.026	
53-70-3	Dibenz(a,h)anthracene	< 0.50	ND	0.30	ND	0.026	
191-24-2	Benzo(g,h,i)perylene	< 0.50	ND	0.30	ND	0.026	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-MB

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge
Test Notes:

Date Collected: NA
Date Received: NA
Date Extracted: 8/28/13
Date Analyzed: 9/03/13
Final Volume: 1.0 ml
Volume Sampled: NA Liter(s)

CAS #	Compound	Result µg/Cartridge	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
91-20-3	Naphthalene	< 5.0	NA	NA	NA	NA	
208-96-8	Acenaphthylene	< 0.50	NA	NA	NA	NA	
83-32-9	Acenaphthene	< 0.50	NA	NA	NA	NA	
86-73-7	Fluorene	< 0.50	NA	NA	NA	NA	
85-01-8	Phenanthrene	< 0.50	NA	NA	NA	NA	
120-12-7	Anthracene	< 0.50	NA	NA	NA	NA	
206-44-0	Fluoranthene	< 0.50	NA	NA	NA	NA	
129-00-0	Pyrene	< 0.50	NA	NA	NA	NA	
56-55-3	Benz(a)anthracene	< 0.50	NA	NA	NA	NA	
218-01-9	Chrysene	< 0.50	NA	NA	NA	NA	
205-99-2	Benzo(b)fluoranthene	< 0.50	NA	NA	NA	NA	
207-08-9	Benzo(k)fluoranthene	< 0.50	NA	NA	NA	NA	
50-32-8	Benzo(a)pyrene	< 0.50	NA	NA	NA	NA	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.50	NA	NA	NA	NA	
53-70-3	Dibenz(a,h)anthracene	< 0.50	NA	NA	NA	NA	
191-24-2	Benzo(g,h,i)perylene	< 0.50	NA	NA	NA	NA	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
NA = Not applicable.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Conestoga-Rovers & Associates, Inc.**
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Project ID: P1303786

Test Code: EPA TO-13A Modified
Instrument ID: HP 5890II+/HP5972A/MS15
Analyst: Madeleine Dangazyan
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge(s)
Test Notes:

Date(s) Collected: 8/23/13
Date(s) Received: 8/27/13
Date(s) Extracted: 8/28/13
Date(s) Analyzed: 9/3/13

Client Sample ID	ALS Sample ID	Fluorene-d10 % Recovered	Fluorene-d10 Acceptance Limits	Pyrene-d10 % Recovered	Pyrene-d10 Acceptance Limits	Data Qualifier
Method Blank	P130828-MB	**92**	60-120	**101**	60-120	
Lab Control Sample	P130828-LCS	**83**	60-120	**94**	60-120	
Duplicate Lab Control Sample	P130828-DLCS	**79**	60-120	**95**	60-120	
080335-082313-PW04B	P1303786-002	**75**	60-120	**102**	60-120	
080335-082313-PW06B	P1303786-004	**79**	60-120	**92**	60-120	
080335-082313-PW13B	P1303786-006	**77**	60-120	**103**	60-120	
080335-082313-PW18B	P1303786-008	**97**	60-120	**114**	60-120	
080335-082313-PW25B	P1303786-010	**91**	60-120	**103**	60-120	

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Conestoga-Rovers & Associates, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P1303786
Client Project ID: **CWM Model City - Sampling of PCBs/Pesticides/PAHs / 080335** ALS Sample ID: P130828-DLCS

Test Code: EPA TO-13A Modified Date Collected: NA
Instrument ID: HP 5890II+/HP5972A/MS15 Date Received: NA
Analyst: Madeleine Dangazyan Date Extracted: 8/28/13
Sampling Media: PUF/XAD-2 (Low Volume) Cartridge Date Analyzed: 9/03/13
Test Notes: Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount LCS / DLCS µg/ml	Result LCS µg/ml	Result DLCS µg/ml	% Recovery LCS	% Recovery DLCS	CAS Acceptance Limits	RPD	RPD Limit	Data Qualifier
91-20-3	Naphthalene	5.00	3.37	3.00	**67**	**60**	60-120	11	27	
208-96-8	Acenaphthylene	5.00	3.28	3.13	**66**	**63**	60-120	5	26	
83-32-9	Acenaphthene	5.00	3.84	3.39	**77**	**68**	60-120	12	21	
86-73-7	Fluorene	5.00	3.75	3.38	**75**	**68**	60-120	10	29	
85-01-8	Phenanthrene	5.00	4.50	3.94	**90**	**79**	60-120	13	17	
120-12-7	Anthracene	5.00	4.17	3.77	**83**	**75**	60-120	10	18	
206-44-0	Fluoranthene	5.00	4.17	4.02	**83**	**80**	60-120	4	11	
129-00-0	Pyrene	5.00	4.15	3.94	**83**	**79**	60-120	5	12	
56-55-3	Benz(a)anthracene	5.00	4.56	4.43	**91**	**89**	60-120	2	10	
218-01-9	Chrysene	5.00	5.07	4.67	**101**	**93**	60-120	8	8	
205-99-2	Benzo(b)fluoranthene	5.00	5.30	5.40	**106**	**108**	60-120	2	24	
207-08-9	Benzo(k)fluoranthene	5.00	5.47	5.60	**109**	**112**	60-120	3	11	
50-32-8	Benzo(a)pyrene	5.00	4.58	4.34	**92**	**87**	60-120	6	10	
193-39-5	Indeno(1,2,3-cd)pyrene	5.00	5.71	5.42	**114**	**108**	60-120	5	19	
53-70-3	Dibenz(a,h)anthracene	5.00	4.74	4.52	**95**	**90**	60-120	5	13	
191-24-2	Benzo(g,h,i)perylene	5.00	4.80	4.55	**96**	**91**	60-120	5	15	