Appendix E3

Report: *2012 Stack Emission*

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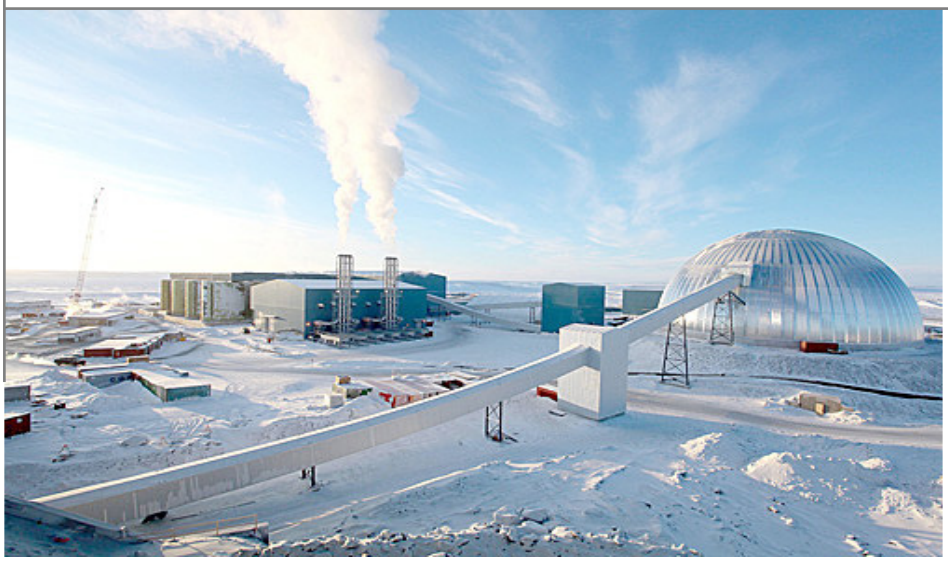
Report
Stack sampling tests



Stack sampling tests
Outlet of the incinerator

Presented to: Agnico-Eagle Mines Ltd.

Our Reference: R12-089R01 (12-076-05763)

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Testing
Advising
Assuring

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1 SUMMARY

Exova Canada Inc. was requested by **Agnico-Eagle Mines ltd. – Meadowbank Division** to sample atmospheric emissions at the outlet of the incinerator for its plant located in Baker Lake, Nunavut at the following address.

Agnico-Eagle Mines Ltd. - Meadowbank Division
P.O. Box 540,
Baker Lake, Nunavut
X0C 0A0

Contact: Mr. Jeffrey Pratt, Environmental coordinator
Telephone: (819) 759-3555, ext. 6728
Cell: (819) 856-1475
Email: Jeffrey.pratt@agnico-eagle.com

1.1 Purposes of the study

The tests were done to demonstrate the performance of the incinerator to meet the standards for mercury (Hg) and dioxins and furans (PCDD/F).

Field testing was carried out on October 2 and 3, 2012 by a team of two technicians. Stack gas properties such as velocity, volumetric flow rates, temperature, moisture content, molecular weight and pressure were all measured concurrently to stack sampling. Three runs were performed for each contaminant. However test # 2 was discarded because the burner operation was not optimal. The test matrix is shown in the following table.

Table 1.1-1 – Overall Test Matrix

Pollutants	Sampling methods
Particulate matter (PM)	EPS 1/RM/8
Anion - Hydrogen chloride (HCl)	EPS 1/RM/1
Metals	EPA 29
SVOC (PCDD/F)	EPS 1/RM/2

The list of metals includes Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, P, K, Se, Si, Ag, Na, Sr, Te, Tl, Sn, Ti, U, V, Zn.

The manual sampling procedure of particulate matter was as shown in table 1.1-2 hereafter.

Table 1.1-2 – Sampling procedures

Sources	# of sampling points (total)	# of sampling points (per traverse)	Sampling time per point (min.)	Total sampling time (min)	Notes
PAM # 1, 2, 3	36	18	5	180	Isokinetic adjustments each 5 minutes
SVOC # 1, 2, 3	36	18	5	180	Isokinetic adjustments each 5 minutes

1.2 Summary of results

All the tests results are summarized in the summary tables appearing below and on the next page and represent the average of two tests. Complete results of the sampling program are presented in section 5.0 of this report.

A comprehensive internal Quality Assurance/Quality Control (QA/QC) plan was designed and implemented by Exova regarding the gaseous emissions. The quality of the sampling data and results is good for all measurements. All the data are consistent and reliable.

The operating conditions were maintained stable throughout each day of the test program except during PAM and SVOC tests # 2. At the beginning of these tests, there was a problem with one burner.

For this project, the applicable standards are shown below with the tests results. The applicable standards for mercury (Hg) and for dioxins and furans (PCDD/F) were met during tests # 1 and # 3. All the results of test # 2 are not presented in this report because the burner operation was not optimal during this run.

Table 1.2-1 – Summary of results

Contaminants	Test results	Standards
Mercury (Hg)	< 0.10 µg / Rm^3 @ 11 % v/v O_2	20 µg / Rm^3 @ 11 % v/v O_2
Dioxins and furans (PCDD/F)	39.9 pg TEQ / Rm^3 @ 11 % v/v O_2	80 pg TEQ / Rm^3 @ 11 % v/v O_2

R: Reference conditions, 25 °C, 101.3 kPa, dry basis.

Table 1.2-2 – Summary of results (Cont'd)

Parameters		PAM train	SVOC train
Concentrations			
PM	(mg/Rm³)	14.1	---
HCl	(mg/Rm³)	43.5	---
Hg	(µg/Rm³)	< 0.07	---
PCDD/F	(pg/Rm³ TEQ)	---	29.1
Emission rates			
PM	(kg/h)	0.098	---
HCl	(kg/h)	0.302	---
Hg	(mg/h)	< 0.503	---
PCDD/F	(ng/h TEQ)	---	202.3
Stack gas properties			
Velocity	(m/s)	7.6	7.6
Actual flow rate	(m³/h)	20055	20123
Reference flow rate	(Rm³/h)	6926	6950
Temperature	(°C)	567	563
Moisture	(% v/v, wet basis)	3.8	4.2
Static pressure	(inch H_2O)	- 0.18	- 0.18
O_2	(% v/v, dry basis)	13.68	13.68
CO_2	(% v/v, dry basis)	3.78	3.78
CO	(ppmv, dry basis)	16	16
Average isokineticity	(%)	98.5	97.5

R : Reference conditions, 25 °C, 101.3 kPa and dry basis.

2 INTRODUCTION

Exova Canada Inc. was requested by **Agnico-Eagle Mines ltd. – Meadowbank Division** to sample the atmospheric emissions at the outlet of an incinerator for its plant located in Baker Lake, Nunavut at the following address.

The report describes the purposes of the study, the field work schedule, the sampling location and the sampling methods employed. All the results are summarized in table form. All field data, analytical results and calibration reports are appended.

2.1 Objective and test matrix

A comprehensive stack testing program was adopted by Exova to determine qualitatively and quantitatively the contents of the stack emissions. Table # 2.1-1 shows the parameters measured during the test program. Three runs were performed for each contaminant during the sampling program. However test # 2 was discarded because the burner operation was not optimal.

Table 2.1-1 – Overall Test Matrix

Pollutants	Sampling methods
Particulate matter (PM)	EPS 1/RM/8
Anion - Hydrogen chloride (HCl)	EPS 1/RM/1
Metals	EPA 29
SVOC (PCDD/F)	EPS 1/RM/2

The list of metals includes Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, P, K, Se, Si, Ag, Na, Sr, Te, Tl, Sn, Ti, U, V, Zn.

2.2 Schedule of test work

The sampling program was carried out on October 2 and 3, 2012 by a team of two technicians. Table # 2.2-1 appearing in this section shows the test schedule.

Table 2.2-1 – Test schedule

Source	Date	Time	Test
Outlet of the incinerator	October 2, 2012	15:15 – 18:30	PAM # 1
	October 2, 2012	15:30 – 18:40	SVOC # 1
	October 3, 2012	07:30 – 11:45	PAM # 2 - Discarded
	October 3, 2012	07:30 – 11:45	SVOC # 2 - Discarded
	October 3, 2012	15:20 – 18:40	PAM # 3
	October 3, 2012	15:15 – 18:30	SVOC # 3

2.3 Project personnel

The following is a list of the direct contributors to this test program.

Table 2.3-1 – Key personnel involved in the project

Name	Experience and responsibilities
Agnico-Eagle Mines Ltd.	
Mr. Jeffrey Pratt – Environmental coordinator	➢ Project coordinator.
Exova Canada Inc.	
Mr. Benoît Bouchard, Technician	➢ PAM and SVOC sampling.
Mr. René Quirion-Blais, Technician	➢ Assistance at the stack.
Mr. Christian St-Pierre, Chemist	➢ Analyses of PM samples.
Mr. Dominic Charland, Chemist	➢ Analyses of PM samples.
Mr. Pierre Duguay, P.Eng. – Supervisor	➢ Report writing.
Mr. Claude Bélanger, Chemist – Operations manager	➢ Report verification.
Agat Laboratories	
Mr. Marc-André Desjardins – Chemist	➢ Analyses of SVOC samples.

2.4 Process operating conditions

Process operating conditions of the incinerator were under Agnico-Eagle's responsibility. The operating conditions were maintained stable throughout each day of the test program except during PAM and SVOC tests # 2. At the beginning of these tests, there was a problem with one burner.

2.5 Applicable standards

For this project, the applicable standards are shown below.

Table 2.5-1 – Applicable standards

Contaminants	Standards
Mercury (Hg)	20 µg / Rm^3 @ 11 % v/v O_2
Dioxins and furans (PCDD/F)	80 pg TEQ / Rm^3 @ 11 % v/v O_2

R: Reference conditions, 25 °C, 101.3 kPa, dry basis.

3 METHODS

3.1 Sampling methods

The following sections give more details on the stack sampling methods used during the test program and their application.

Table 3.1-1 – Sampling methods

Parameters	Methods	Sampling duration (min.)
Manual sampling methods		
Temperature	Thermometer or thermocouple	Ponctual
Gas flow	SPE 1/RM/8, method B – Environment Canada	Ponctual
O_2, CO_2, CO	SPE 1/RM/8, method C – Environment Canada	Ponctual
Moisture content	SPE 1/RM/8, method D – Environment Canada	Ponctual
Particulate matter (PM)	SPE 1/RM/8, method E – Environment Canada	180
Anions (HCl)	SPE 1/RM/1 – Environment Canada	
Metals	Method 29 - USEPA	
SVOC	SPE 1/RM/2 – Environment Canada	180

3.2 Sampling acceptance criteria

Isokinetic sampling means that the linear velocity of the stack gases entering the nozzle of the sampling probe is equal to the stack gas velocity at the sampling point. Acceptance criteria for a sampling run related to the reference methods that are used are as in the following table.

Table 3.2-1 – Sampling validity criteria

Parameters / Methods	Acceptance criteria
PM / Anion / Metals / SPE 1/RM/8 – Environment Canada & 29 - USEPA	➢ Isokinetic rate comprised between 90 % and 110 % ➢ Less than 10% of the sampled points out of the 90 % to 110 % range ➢ Minimum sampling duration : 120 minutes ➢ Minimum sampled volume : 2.80 Rm^3
SVOC / SPE 1/RM/2 – Environment Canada	➢ Isokinetic rate comprised between 90 % and 110 % ➢ Less than 10% of the sampled points out of the 90 % to 110 % range ➢ Minimum sampling duration : 180 minutes ➢ Minimum sampled volume : 3.00 Rm^3

3.3 Particulate matter (PM), hydrogen chloride and metals

Particulate matter (PM), hydrogen chloride (HCl) and metals were sampled in accordance with the requirements of Environment Canada EPS 1/RM/8 sampling method entitled: "Reference methods for source testing: measurement of releases of particulate from stationary sources". This method was combined with Environment Canada EPS 1/RM/1 sampling method entitled: "Reference methods for source testing: measurement of releases of hydrogen chloride from stationary sources" and USEPA method 29 entitled “Metals emissions from stationary sources" in order to allow for anion and metals sampling. Sampling lasted 180 minutes and a minimal volume of at least 2.80 Rm³ was sampled for each run. Three PM / HCl / metals tests were conducted simultaneously to the SVOC tests during each run.

Particulate matter (PM), anion (HCl), and metals (including mercury) are sampled isokinetically using a single sampling train. This is recognized as the standard method for obtaining representative samples of particulate matter.

Two complete sampling trains were prepared for this project and were transported to the worksite. Sampling nozzles, pitot tubes, dry gas meters and orifice flow meters were calibrated in accordance with the Environment Canada testing code. A standard Method 5 sampling module was used, with a 5 foot probe with a glass liner. The sampling train was as follows.

Table 3.3-1 – Main components of the sampling system – PM / HCl / metals

Components	Description
Sampling probe	➢ A stainless steel nozzle of a precisely measured diameter to allow isokinetic sampling ; ➢ a stainless steel water-cooled probe with a heated glass liner to avoid moisture condensation ; ➢ this probe is fastened to an "S" type Pitot tube for gas velocity measurement and to a thermocouple for temperature measurement.
Sampling train	➢ A 0.3 µm porosity pre-weighted quartz filter mounted on an accurate holder and placed in a heated oven to avoid moisture condensation ; ➢ eight impingers placed in series and containing : ➢ # 1 and # 2: 100 ml demineralized water ; ➢ # 3 and # 4: 100 ml HNO_3 (5%) / H_2O_2 (10%) solution ; ➢ # 5 : empty ; ➢ # 6 and # 7 : 100 ml $KMnO_4$ (4%) / H_2SO_4 (10%) solution ; ➢ # 8: 200 g silica gel ; ➢ impingers are placed in an ice bath to condense all the flue gas moisture.
Control unit	➢ A diaphragm leak free vacuum pump ; ➢ a dry gas meter ; ➢ an orifice flow meter ; ➢ probe and oven temperature controllers ; ➢ temperature display (stack, gas meter, impingers, resin).

At the end of each sampling run the sampling train was brought back to the field laboratory to process with sample recovery. The procedure followed for sample recovery is as in the following table.

Table 3.3-2 – Sample recovery – PM / HCl / metals

Components	Description
Nozzle and probe	➢ The nozzle and probe are rinsed and brushed with acetone ; ➢ the rinses are kept in polyethylene with a Teflon lid ; ➢ the nozzle and probe are rinsed and brushed with the HNO_3 0.1 N solution ; ➢ the rinses are kept in another polyethylene container with a Teflon lid.
Filter	➢ The filter is placed in a plastic petri dish ; ➢ the pieces of the filter stuck to the rubber are carefully replaced with the filter.
Impingers # 1 and # 2	➢ The volume of solution is measured for moisture content determination ; ➢ the solution is transferred in a polyethylene container with a Teflon lid ; ➢ the glassware is rinsed with demineralized water ; ➢ the rinses are added to the same container in which the impingers solution have been placed ; ➢ the solution is acidified.
Impingers # 3 and # 4	➢ The volume of the solution is measured for moisture content determination ; ➢ the solution is transferred in a polyethylene container with a Teflon lid ; ➢ the glassware is rinsed with the HNO_3 solution ; ➢ the rinses are added to the same container in which the impingers solution have been placed ; ➢ the total volume of the solution is noted.
Impingers # 5, # 6 and # 7	➢ The volume of the solution is measured for moisture content determination ; ➢ the solution is transferred in an amber glass container with a Teflon lid ; ➢ the glassware is rinsed with the acidified permanganate solution ; ➢ the rinses are added to the same container in which the impingers solution have been placed ; ➢ the total volume of the solution is noted.
Impinger # 8	➢ The silica gel is weighted in order to determine the moisture content.

Analyses of the different components of the sampling train were done as in the following table.

Exova performed the analyses for particulate matter on the probe wash and on the filter. Exova was responsible as well for the metals analyses.

Table 3.3-3 – Samples analyses – PM / metals

Components	Description
Nozzle and probe	➢ Washing of the nozzle and probe are evaporated to dryness ; ➢ The residue's weight is noted constitutes one part of the particulate matter.
Filter	➢ The filter is placed in a dessiccator for a period of 24 hours ; ➢ the filter is weighted and the weight is noted; ➢ the residue constitutes another part of the particulate matter.
Particulate matter and HNO_3 0.1 N washings of probe-nozzle and filter holder front half	➢ particulate matter are combined with the HNO_3 washings for digestion and analysed for metals.
Impingers # 1 and # 2	➢ Part of the acidified solution is taken and analysed for HCl and metals content.
Impingers # 3 and # 4	➢ Part of the HNO_3 solution is taken and analysed for metals content.
Impingers # 5, # 6 and # 7	➢ Part of the acidified permanganate solution is taken and analysed for mercury content.
Impinger # 8	➢ No analysis is performed on this component.

3.4 Semi-volatile organic compounds (SVOC)

Semi-Volatile Organic Compounds (SVOC) are defined as organic compounds with boiling points greater than 100 °C. This class of compounds includes PCDD (PolyChlorinated Dibenzo p Dioxins), PCDF (PolyChlorinated DibenzoFurans), CP (ChloroPhenols), CB (ChloroBenzenes), PCB (PolyChlorinated Biphenyls) and PAH (Polycyclic Aromatic Hydrocarbons).

SVOCs were sampled in accordance with the requirements of Environment Canada EPS 1/RM/2 sampling method entitled: " Reference Method for Source Testing: Measurement of Releases of Selected Semi-volatile Organic Compounds from Stationary Sources ". For this project SVOCs included polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF). Sampling lasted 180 minutes and a minimal volume of at least 3.00 Rm^3 were sampled for each run. At the outlet of the incinerator, three SVOC tests were conducted.

Five (5) train glassware sets were cleaned and one common rinse was analyzed for proofing. Three (3) of these trains were used for testing, one (1) was used as field blank and the remaining one was kept as spares.

A standard Method 5 sampling module was used, with a 5 foot borosilicate lined (proofed) probe. Sampling nozzles, pitot tubes, dry gas meters and orifice flow meters are calibrated in accordance with the EPS testing code.

Sampling train was assembled every day for the test to be held on the same day. Two rinses (Acetone & Hexane – 3 times each) were done before each test. The sampling train was as in the following.

Table 3.4-1 – Main components of the sampling system – SVOC

Components	Description
Sampling probe	➢ A stainless steel nozzle of a precisely measured diameter to allow isokinetic sampling ; ➢ a stainless steel water-cooled probe with a heated glass liner to avoid moisture condensation ; ➢ this probe is fastened to an "S" type Pitot tube for gas velocity measurement and to a thermocouple for temperature measurement.
Sampling train	➢ A 0.3 µm porosity pre-weighted fiber glass filter mounted on an accurate holder and placed in a heated oven to avoid moisture condensation ; ➢ a condenser ; ➢ a XAD-2 resin cartridge ; ➢ a condensate trap ; ➢ three impingers placed in series and containing : ➢ # 1: 100 ml ethylene glycol ; ➢ # 2 : empty ; ➢ # 3: 200 g silica gel ; ➢ the impingers are placed in an ice bath to condense all the flue gas moisture.
Control unit	➢ A diaphragm leak free vacuum pump ; ➢ a dry gas meter ; ➢ an orifice flow meter ; ➢ probe and oven temperature controllers ; ➢ temperature display (stack, gas meter, impingers, resin).

At the end of each sampling run the sampling train was brought back to the field laboratory to process with sample recovery. The procedure followed for sample recovery is as in the following table. Except for the filter, all the sampling train's components were first rinsed three times with acetone and then three times with hexane. After recovery was completed, all samples were clearly documented in lab journals, with each sample container clearly labelled, and stored in a refrigerator.

Along with one of the three SVOC tests, a blank train has been taken to the stack sampling site and left untouched for the duration of the test. At the end of the test, a volume of ambient air equal to the sum of all leak check volumes during the SVOC test was run through the blank train, according to the requirements of reference method EPS 1/RM/2.

The blank train was recovered in the field laboratory in the same manner as the compliance test trains. The field blank train has been analysed by Agat. Because they each constitute a part of the blank train, solvents, reactives, filters and the XAD-2 resin were not sampled and analysed as individual blanks. The train analysis was performed as per methods EPS 1/RM/3, EPS 1/RM/23 and NITEP/Mid Connecticut Combustion Test Methodology for Organic Analysis.

Table 3.4-2 – Sample recovery – SVOC

Components	Description
Nozzle, probe and front half of filter holder	➢ Each component is rinsed three times and brushed with acetone and then three times with hexane ; ➢ all the rinses are kept in amber glass container with a Teflon lid.
Filter	➢ The filter is carefully removed from filter holder and deposited on a pre-cleaned aluminum foil ; ➢ the pieces of the filter stuck to the rubber are carefully replaced with the filter ; ➢ the filter is folded in half and placed in a pre-cleaned glass petri dish.
Back half of filter holder and condenser	➢ The condenser is weighted in order to determine the moisture content ; ➢ each component is soaked 5 minutes each with acetone and hexane ; ➢ each component is rinsed three times with acetone and then three times with hexane ; ➢ all the rinses are kept in amber glass container with a Teflon lid.
Resin cartridge	➢ The cartridge is weighted in order to determine the moisture content ; ➢ both ends of the cartridge are sealed ; ➢ the whole tube is wrapped with an aluminum foil.
Condensate trap and impinger # 1	➢ Each component is weighted in order to determine the moisture content ; ➢ the solution of each container is transferred into a pre-cleaned amber glass bottle ; ➢ each component is rinsed three times each with HPLC water ; ➢ the rinses are added into the same container.
All back half glassware excluding resin cartridge	➢ Each component including connectors are rinsed three times each with acetone and hexane ; ➢ all the rinses are kept into a pre-cleaned glass amber bottle.
Impingers # 2 and # 3	➢ Each component is weighted in order to determine the moisture content.

Procedures in Environment Canada's Reports EPS 1/RM/3 and EPS 1/RM/23 were followed by Agat. All glassware was rinsed (with acetone and hexane) on site prior to usage, as per EPS 1/RM/2. SVOC samples were treated as one combined extract per test. Front and back halves of the sampling trains were not analyzed separately. The following analyses were done by the laboratory.

Table 3.4-3 – Samples analyses – SVOC

Components	Description
Proofing	➢ 1 analysis for PCDD/F (1 combined proof rinse for all 5 trains glassware, XAD resin + filters).
Laboratory blank	➢ 1 analysis as part of the lab internal quality control.
Field blank	➢ 1 analysis for PCDD/F.
Samples	➢ 3 analyses (1 analysis per train) for PCDD/F.

The proofing procedures detailed in Environment Canada's Report EPS 1/RM/2 entitled "Reference Method for Source Testing: Measurement of Releases of Selected Semi Volatile Organic Compounds from Stationary Sources" dated June 1989 were followed. These procedures have been carried out several times by the personnel assigned to this study.

Items cleaned by Exova: probe glass liners, all train glassware, petri dishes used for storing filters, XAD-2 traps and sample containers.

Items cleaned by Agat: XAD-2 resin, glass wool and filters.

All solvents and reagents used in this project were supplied by Exova except for the Amberlite XAD-2 resin and glass wool which were supplied by Agat. Exova's and Agat's last rinsings were combined to produce 1 final sample for proofing. One proofing analysis was carried out by Agat.

3.5 Gas molecular weight

Gas molecular weight was determined by measuring O_2, CO_2 and CO in accordance with the requirements of Environment Canada EPS 1/RM/8 sampling method entitled : "Reference methods for source testing : measurement of releases of particulate from stationary sources".

All system's components in contact with the stack gas were made of stainless steel. The gas composition at the sampling site was measured by connecting the analyser to the exhaust of the control unit. Specifications of the analyser are as in the following table.

Table 3.5-1 – Specifications of the analyser used for gas molecular weight determination

Pollutant	O_2	CO_2	CO
Measuring principle	Electrochemical cell	Thermoconductivity cell	Electrochemical cell
Instrument	Nova 376	Nova 376	Nova 376
Measuring range	0 – 25 % v/v	0 – 20 % v/v	0 – 4 % v/v

3.6 Gas temperature, moisture content and flowrate

Gas temperature, flowrate, velocity and moisture content were measured at the sampling site according to "Reference methods for source testing: measurement of releases of particulate from stationary sources". Methods B and D, Environment Canada, December 1993, EPS 1/RM/8.

4 SAMPLED SOURCE

4.1 Outlet of the incinerator

Sampling was conducted at the outlet of the incinerator. A description of the sampling location is shown below.

Table 4.1-1 – Outlet of the incinerator

Parameter	Value
Stack inside diameter at the sampling site	38.0''
Length of sampling ports	10.0"
No. of straight duct diameters upstream from the sampling ports	5.0 D
No. of straight duct diameters downstream of the sampling ports	2.0 D
No. of sampling traverses	2
Total no. of sampling points per sampling traverse	18
Total no. of sampling points per test	36
Sampling time per point (minutes)	5

4.2 Sampling equipment

The sampling equipment used for particulate matter (PM) / hydrogen chloride (HCl) / metals testing and for SVOC testing are described in the following tables.

Table 4.2-1 – Sampling equipment for PM / HCl / metals train

Parameter	Test # 1	Test # 3
Sampling module	L1	L1
Gas meter factor (γ)	0.9862	0.9862
Orifice factor (K_o)	0.8852	0.8852
Probe	2' F (eau)	2' F (eau)
Pitot factor (Cv)	0.816	0.816
Nozzle (inches)	0.540	0.540

Table 4.2-2 – Sampling equipment for SVOC train

Parameter	Test # 1	Test # 3
Sampling module	L2	L2
Gas meter factor (γ)	0.9855	0.9855
Orifice factor (K_o)	1.1256	1.1256
Probe	2' E (eau)	2' E (eau)
Pitot factor (Cv)	0.816	0.816
Nozzle (inches)	0.527	0.527

4.3 QA/QC report

The following tables show the quality assurance / quality control parameters applied during the test program. These parameters deal with the gas flow conditions at the sampling location, the sampling equipment/procedures employed and the isokineticity of the tests. The value of each parameter is compared to a quality acceptance criterion formulated in the reference sampling methods.

Table 4.3-1 – Gas flow conditions

Parameter	Actual		Quality criteria
Duct diameter (inches)	38.0		≥ 12.0
Sampling cross-section (ft^2)	7.88		≥ 0.78
No. of duct diam. upstream	5.0 D		≥ 2.0 D
No. of stack diam. downstream	2.0 D		≥ 0.5 D
No. of sampling traverses	2		2 or more
Cyclonic flow	0°		≤ 15°
PM / HCl / metals tests	**# 1**	**# 3**	
Maximum stack gas velocity (ft/s)	26.1	26.3	≤ 100
Minimum stack gas velocity (ft/s)	22.4	22.6	≥ 10.0
Highest Ratio Vmax / Vmin	1.2	1.2	≤ 2.0
SVOC tests	**# 1**	**# 3**	
Maximum stack gas velocity (ft/s)	30.6	29.2	≤ 100
Minimum stack gas velocity (ft/s)	22.3	22.4	≥ 10.0
Highest Ratio Vmax / Vmin	1.4	1.3	≤ 2.0

The gas flow conditions at the sampling location can be considered as ideal since all quality criteria required by the reference sampling method are met.

Table 4.3-2 – Sampling equipment and procedures

PM / HCl / metals	Test # 1	Test # 3	Quality criteria
Filter enclosure temperature (^{O}F)	250	250	248 ± 25
Probe temperature (^{O}F)	250	250	248 ± 25
Maximum leak rate (cfm)	< 0.02	< 0.02	≤ 0.02
Nozzle diameter (in.)	0.540	0.540	≥ 0.188
Gas meter calibration factor	0.9862	0.9862	0.95 ≤ γ ≤ 1.05
Sampling duration (min)	180	180	≥ 120
Gas sample volume (Rm^3)	4.122	4.142	≥ 2.80
SVOC	**Test # 1**	**Test # 3**	**Quality criteria**
Filter enclosure temperature (^{O}F)	250	250	248 ± 25
Probe temperature (^{O}F)	250	250	248 ± 25
Resin XAD-2 temperature (^{O}F)	55	55	≤ 68
Maximum leak rate (cfm)	< 0.02	< 0.02	≤ 0.02
Nozzle diameter (in.)	0.527	0.527	≥ 0.188
Gas meter calibration factor	0.9855	0.9855	0.95 ≤ γ ≤ 1.05
Sampling duration (min)	180	180	≥ 180
Gas sample volume (Rm^3)	3.985	3.826	≥ 3.00

All quality criteria required by the reference sampling method were met concerning the sampling equipment and procedures. No equipment failure, leaks or sample recovery problems were encountered during the testing program.

Table 4.3-3 – Isokineticity

PM / HCl / metals	Test # 1	Test # 3	Quality criteria
Average (%)	97.6	99.3	90 % ≤ Iso ≤ 110 %
> 110%	0 / 36	0 / 36	≤ 3 / 36
< 90%	0 / 36	0 / 36	
SVOC	**Test # 1**	**Test # 3**	**Quality criteria**
Average (%)	98.0	97.0	90 % ≤ Iso ≤ 110 %
> 110%	0 / 36	0 / 36	≤ 3 / 36
< 90%	0 / 36	0 / 36	

All quality criteria required by the reference sampling method were met concerning the isokineticity of the tests.

5 TABLES OF RESULTS

All the tests results are summarized in section 1.2 and represent the average of two tests. Complete results for particulate matter (PM) and chlorhydric acid (HCl) are presented in table # 1. For metals, summary results are presented in table # 2 and detailed results are presented in tables 3 and 4.

For dioxins and furans (PCDD/F), summary results are presented in table # 5 and detailed results are presented in tables 6 and 7 with field blank results. The PCDD/PCDF tables of results give the analytical results in terms of international toxic equivalent (ITEQ) of the dioxin and furan congeners (expressed as 2, 3, 7, 8-T4CDD) as per method EPS 1/RM/2 requirements.

Results of PM / HCl / metals and SVOC include stack gas properties (velocity, flow, temperature, moisture, static pressure, molecular weight) measured during each test.

1 : Detailed results of particulate matter (PM) and HCl emissions ;
2 : Summary results of metals emissions ;
3 : Detailed results of metals emissions – test # 1 ;
4 : Detailed results of metals emissions – test # 3 ;
5 : Summary results of SVOC emissions ;
6 : Detailed results of PCDD/F emissions – test # 1 ;
7 : Detailed results of PCDD/F emissions – test # 3.

The quality of the sampling data and results is good for all measurements. All the data are consistent and reliable.

The operating conditions were maintained stable throughout each day of the test program except during PAM and SVOC tests # 2. At the beginning of these tests, there was a problem with one burner.

The applicable standards for mercury (Hg) and for dioxins and furans (PCDD/F) were met during tests # 1 and # 3. All the results of test # 2 are not presented in this report because the burner operation was not optimal during this run.

TABLE # 1
OUTLET OF INCINERATOR
SUMMARY OF ATMOSPHERIC EMISSIONS
PARTICULATE MATTER - ANIONS

Test	1	3	
Date	2-Oct-12	3-Oct-12	AVERAGE
Time	15:15 - 18:30	15:20 - 18:40	
WEIGHT OF SAMPLE			
Particulate matter (mg)	52.52	63.99	
HCl (mg)	293.10	65.51	
GAS SAMPLE VOLUME (Rm³)	4.122	4.142	
CONCENTRATIONS			
Particulate matter (mg/Rm³)	12.7	15.4	14.1
Particulate matter (mg/Rm³ @ 11 % O2)	17.6	21.0	19.3
HCl (mg/Rm³)	71.1	15.8	43.5
HCl (ppmv)	47.7	10.6	29.2
EMISSION MASS FLOW RATES			
Particulate matter (kg/h)	0.089	0.106	0.098
HCl (kg/h)	0.495	0.109	0.302
STACK GAS PROPERTIES			
VELOCITY (m/s)	7.6	7.6	7.6
VOLUMETRIC FLOW RATES			
m³/h (Actual conditions)	20075	20034	20055
Rm³/h (Reference conditions)	6967	6885	6926
TEMPERATURE (°C)	564	569	567
MOISTURE (% v/v, wet basis)	3.1	4.4	3.8
STATIC PRESSURE (" H2O)	-0.18	-0.18	-0.18
GAS COMPOSITION (dry basis)			
O2 (% v/v)	13.75	13.60	13.68
CO2 (% v/v)	4.65	2.91	3.78
CO (ppmv)	10	22	16
AVERAGE ISOKINETICITY (%)	97.6	99.3	98.5

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 2
OUTLET OF INCINERATOR
RESULTS OF METALS ATMOSPHERIC EMISSIONS

Test	1	3	Average
Date	2-Oct-12	3-Oct-12	
Time	15:15 - 18:30	15:20 - 18:40	

Metals	Concentrations (µg/Rm³)		
Aluminum (Al)	6.31	36.70	21.50
Antimony (Sb)	0.39	4.49	2.44
Arsenic (As)	0.22	0.39	0.30
Baryum (Ba)	< 7.52	1.42	< 4.47
Beryllium (Be)	< 0.73	< 0.72	< 0.73
Bismuth (Bi)	< 1.21	< 1.21	< 1.21
Boron (B)	< 15.04	< 15.45	< 15.25
Cadmium (Cd)	0.29	1.09	0.69
Calcium (Ca)	56.53	405.60	231.06
Chromium (Cr)	1.16	3.07	2.12
Cobalt (Co)	< 0.73	< 0.72	< 0.73
Copper (Cu)	3.52	20.57	12.04
Iron (Fe)	8.01	127.47	67.74
Lead (Pb)	8.61	35.49	22.05
Lithium (Li)	0.63	2.46	1.55
Magnesium (Mg)	9.80	19.87	14.84
Manganese (Mn)	63.83	3.38	33.60
Mercury (Hg)	< 0.07	< 0.07	< 0.07
Molybdenum (Mo)	0.24	1.69	0.97
Nickel (Ni)	8.27	0.85	4.56
Phosphorus (P)	< 74.96	289.72	< 182.34
Potassium (K)	1094.13	4611.30	2852.71
Selenium (Se)	< 0.73	0.17	< 0.45
Silicium (soluble in HNO3)	17.95	76.05	47.00
Silver (Ag)	0.22	0.34	0.28
Sodium (Na)	781.17	2559.15	1670.16
Strontium (Sr)	< 0.73	0.39	< 0.56
Tellurium (Te)	< 0.73	< 0.72	< 0.73
Thallium (Tl)	< 0.73	< 0.72	< 0.73
Tin (Sn)	6.77	23.35	15.06
Titanium (Ti)	< 0.73	1.04	< 0.88
Uranium (U)	< 0.73	< 0.72	< 0.73
Vanadium (V)	0.05	< 0.72	< 0.39
Zinc (Zn)	16.91	335.59	176.25

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 2 (cont'd)
OUTLET OF INCINERATOR
RESULTS OF METALS ATMOSPHERIC EMISSIONS

Test	1	3	Average
Date	2-Oct-12	3-Oct-12	
Time	15:15 - 18:30	15:20 - 18:40	

Metals	Concentrations (µg/Rm³ @ 11 % O2)		
Aluminum (Al)	8.73	49.77	29.25
Antimony (Sb)	0.54	6.09	3.31
Arsenic (As)	0.30	0.52	0.41
Baryum (Ba)	< 10.41	1.93	< 6.17
Beryllium (Be)	< 1.01	< 0.98	< 0.99
Bismuth (Bi)	< 1.68	< 1.64	< 1.66
Boron (B)	< 20.83	< 20.95	< 20.89
Cadmium (Cd)	0.40	1.47	0.94
Calcium (Ca)	78.27	550.06	314.16
Chromium (Cr)	1.61	4.16	2.89
Cobalt (Co)	< 1.01	< 0.98	< 0.99
Copper (Cu)	4.87	27.90	16.38
Iron (Fe)	11.08	172.88	91.98
Lead (Pb)	11.92	48.13	30.03
Lithium (Li)	0.87	3.34	2.11
Magnesium (Mg)	13.57	26.95	20.26
Manganese (Mn)	88.38	4.58	46.48
Mercury (Hg)	< 0.10	< 0.10	< 0.10
Molybdenum (Mo)	0.34	2.29	1.31
Nickel (Ni)	11.45	1.15	6.30
Phosphorus (P)	< 103.80	392.90	< 248.35
Potassium (K)	1514.95	6253.68	3884.31
Selenium (Se)	< 1.01	0.23	< 0.62
Silicium (soluble in HNO3)	24.86	103.14	64.00
Silver (Ag)	0.30	0.46	0.38
Sodium (Na)	1081.63	3470.63	2276.13
Strontium (Sr)	< 1.01	0.52	< 0.77
Tellurium (Te)	< 1.01	< 0.98	< 0.99
Thallium (Tl)	< 1.01	< 0.98	< 0.99
Tin (Sn)	9.37	31.66	20.52
Titanium (Ti)	< 1.01	1.41	< 1.21
Uranium (U)	< 1.01	< 0.98	< 0.99
Vanadium (V)	0.07	< 0.98	< 0.52
Zinc (Zn)	23.41	455.11	239.26

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 2 (cont'd)
OUTLET OF INCINERATOR
RESULTS OF METALS ATMOSPHERIC EMISSIONS

Test	1	3	Average
Date	2-Oct-12	3-Oct-12	
Time	15:15 - 18:30	15:20 - 18:40	

Metals	Emission rates (µg/s)		
Aluminum (Al)	12.21	70.18	41.19
Antimony (Sb)	0.75	8.59	4.67
Arsenic (As)	0.42	0.74	0.58
Baryum (Ba)	< 14.55	2.72	< 8.64
Beryllium (Be)	< 1.41	< 1.39	< 1.40
Bismuth (Bi)	< 2.35	< 2.31	< 2.33
Boron (B)	< 29.11	< 29.55	< 29.33
Cadmium (Cd)	0.56	2.08	1.32
Calcium (Ca)	109.39	775.66	442.52
Chromium (Cr)	2.25	5.86	4.06
Cobalt (Co)	< 1.41	< 1.39	< 1.40
Copper (Cu)	6.81	39.34	23.07
Iron (Fe)	15.49	243.78	129.64
Lead (Pb)	16.67	67.87	42.27
Lithium (Li)	1.22	4.71	2.97
Magnesium (Mg)	18.97	38.00	28.48
Manganese (Mn)	123.52	6.46	64.99
Mercury (Hg)	< 0.14	< 0.14	< 0.14
Molybdenum (Mo)	0.47	3.23	1.85
Nickel (Ni)	16.01	1.62	8.81
Phosphorus (P)	< 145.07	554.04	< 349.56
Potassium (K)	2117.32	8818.53	5467.93
Selenium (Se)	< 1.41	0.32	< 0.87
Silicium (soluble in HNO3)	34.74	145.44	90.09
Silver (Ag)	0.42	0.65	0.53
Sodium (Na)	1511.70	4894.05	3202.88
Strontium (Sr)	< 1.41	0.74	< 1.07
Tellurium (Te)	< 1.41	< 1.39	< 1.40
Thallium (Tl)	< 1.41	< 1.39	< 1.40
Tin (Sn)	13.10	44.65	28.87
Titanium (Ti)	< 1.41	1.99	< 1.70
Uranium (U)	< 1.41	< 1.39	< 1.40
Vanadium (V)	0.09	< 1.39	< 0.74
Zinc (Zn)	32.72	641.77	337.24

TABLE # 3

OUTLET OF INCINERATOR
METALS EMISSIONS AT THE STACK

TEST #	*1*
DATE	*2-Oct-12*
TIME	*15:15 - 18:30*

Metals		ANALYSES OF SAMPLE µg		CONCENTRATION (1) µg/Rm³		EMISSION RATE (1) µg/s		CONCENTRATION (1) µg/Rm³ @ 11 % O2
Aluminum (Al)		26.0		6.31		12.21		8.73
Antimony (Sb)		1.6		0.39		0.75		0.54
Arsenic (As)		0.9		0.22		0.42		0.30
Baryum (Ba)	<	31.0	<	7.52	<	14.55	<	10.41
Beryllium (Be)	<	3.0	<	0.73	<	1.41	<	1.01
Bismuth (Bi)	<	5.0	<	1.21	<	2.35	<	1.68
Boron (B)	<	62.0	<	15.04	<	29.11	<	20.83
Cadmium (Cd)		1.2		0.29		0.56		0.40
Calcium (Ca)		233.0		56.53		109.39		78.27
Chromium (Cr)		4.8		1.16		2.25		1.61
Cobalt (Co)	<	3.0	<	0.73	<	1.41	<	1.01
Copper (Cu)		14.5		3.52		6.81		4.87
Iron (Fe)		33.0		8.01		15.49		11.08
Lead (Pb)		35.5		8.61		16.67		11.92
Lithium (Li)		2.6		0.63		1.22		0.87
Magnesium (Mg)		40.4		9.80		18.97		13.57
Manganese (Mn)		263.1		63.83		123.52		88.38
Mercury (Hg)	<	0.3	<	0.07	<	0.14	<	0.10
Molybdenum (Mo)		1.0		0.24		0.47		0.34
Nickel (Ni)		34.1		8.27		16.01		11.45
Phosphorus (P)	<	309.0	<	74.96	<	145.07	<	103.80
Potassium (K)		4510.0		1094.13		2117.32		1514.95
Selenium (Se)	<	3.0	<	0.73	<	1.41	<	1.01
Silicium (soluble in HNO3)		74.0		17.95		34.74		24.86
Silver (Ag)		0.9		0.22		0.42		0.30
Sodium (Na)		3220.0		781.17		1511.70		1081.63
Strontium (Sr)	<	3.0	<	0.73	<	1.41	<	1.01
Tellurium (Te)	<	3.0	<	0.73	<	1.41	<	1.01
Thallium (Tl)	<	3.0	<	0.73	<	1.41	<	1.01
Tin (Sn)		27.9		6.77		13.10		9.37
Titanium (Ti)	<	3.0	<	0.73	<	1.41	<	1.01
Uranium (U)	<	3.0	<	0.73	<	1.41	<	1.01
Vanadium (V)		0.2		0.05		0.09		0.07
Zinc (Zn)		69.7		16.91		32.72		23.41

GAS SAMPLE VOLUME (Rm³) :	4.122

STACK GAS PROPERTIES	
VELOCITY (m/s)	7.6
VOLUMETRIC FLOW RATE	
m³/h (actual conditions)	20075
Rm³/h (reference conditions)	6967
GAS TEMPERATURE (°C)	564
MOISTURE (% v/v wet basis)	3.1
STATIC PRESSURE (inch H2O)	-0.18
GAS COMPOSITION (dry basis)	
O2 (% v/v)	13.75
CO2 (% v/v)	4.65
CO (ppmv)	9.5

(1) When an analysis is"< D.L.", the detection limit (D.L.) is used in the calculations of concentration and emission.

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 4

OUTLET OF INCINERATOR
METALS EMISSIONS AT THE STACK

TEST #	*3*
DATE	*October 3, 2012*
TIME	*15:20 - 18:40*

Metals	ANALYSES OF SAMPLE µg	CONCENTRATION (1) µg/Rm³	EMISSION RATE (1) µg/s	CONCENTRATION (1) µg/Rm³ @ 11 % O2
Aluminum (Al)	152.0	36.70	70.18	49.77
Antimony (Sb)	18.6	4.49	8.59	6.09
Arsenic (As)	1.6	0.39	0.74	0.52
Baryum (Ba)	5.9	1.42	2.72	1.93
Beryllium (Be)	< 3.0	< 0.72	< 1.39	< 0.98
Bismuth (Bi)	< 5.0	< 1.21	< 2.31	< 1.64
Boron (B)	< 64.0	< 15.45	< 29.55	< 20.95
Cadmium (Cd)	4.5	1.09	2.08	1.47
Calcium (Ca)	1680.0	405.60	775.66	550.06
Chromium (Cr)	12.7	3.07	5.86	4.16
Cobalt (Co)	< 3.0	< 0.72	< 1.39	< 0.98
Copper (Cu)	85.2	20.57	39.34	27.90
Iron (Fe)	528.0	127.47	243.78	172.88
Lead (Pb)	147.0	35.49	67.87	48.13
Lithium (Li)	10.2	2.46	4.71	3.34
Magnesium (Mg)	82.3	19.87	38.00	26.95
Manganese (Mn)	14.0	3.38	6.46	4.58
Mercury (Hg)	< 0.3	< 0.07	< 0.14	< 0.10
Molybdenum (Mo)	7.0	1.69	3.23	2.29
Nickel (Ni)	3.5	0.85	1.62	1.15
Phosphorus (P)	1200.0	289.72	554.04	392.90
Potassium (K)	19100.0	4611.30	8818.53	6253.68
Selenium (Se)	0.7	0.17	0.32	0.23
Silicium (soluble in HNO3)	315.0	76.05	145.44	103.14
Silver (Ag)	1.4	0.34	0.65	0.46
Sodium (Na)	10600.0	2559.15	4894.05	3470.63
Strontium (Sr)	1.6	0.39	0.74	0.52
Tellurium (Te)	< 3.0	< 0.72	< 1.39	< 0.98
Thallium (Tl)	< 3.0	< 0.72	< 1.39	< 0.98
Tin (Sn)	96.7	23.35	44.65	31.66
Titanium (Ti)	4.3	1.04	1.99	1.41
Uranium (U)	< 3.0	< 0.72	< 1.39	< 0.98
Vanadium (V)	< 3.0	< 0.72	< 1.39	< 0.98
Zinc (Zn)	1390.0	335.59	641.77	455.11

GAS SAMPLE VOLUME (Rm³) :	4.142

STACK GAS PROPERTIES	
VELOCITY (m/s)	7.6
VOLUMETRIC FLOW RATE	
m³/h (actual conditions)	20034
Rm³/h (reference conditions)	6885
GAS TEMPERATURE (°C)	569
MOISTURE (% v/v wet basis)	4.4
STATIC PRESSURE (inch H2O)	-0.18
GAS COMPOSITION (dry basis)	
O2 (% v/v)	13.60
CO2 (% v/v)	2.91
CO (ppmv)	22.1

(1) When an analysis is"< D.L.", the detection limit (D.L.) is used in the calculations of concentration and emission.

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 5
OUTLET OF INCINERATOR
SUMMARY OF ATMOSPHERIC EMISSIONS
SVOC

Test	1	3	
Date	2-Oct-12	3-Oct-12	Average
Time	15:30 - 18:40	15:15 - 18:30	
Weight of sample			
PCDD/F (pg TEQ)	108.00	119.22	
Gas sample volume (Rm^3)	3.985	3.826	
CONCENTRATIONS			
PCDD/F (pg/Rm^3 TEQ)	27.1	31.2	29.1
PCDD/F (pg/Rm^3 TEQ @ 11 % O2)	37.5	42.3	39.9
MASS EMISSION RATE			
PCDD/F (ng/h TEQ)	191.2	213.3	202.3
STACK GAS PROPERTIES			
VELOCITY (m/s)	7.8	7.5	7.6
VOLUMETRIC FLOW RATES			
m^3/h (Actual conditions)	20499	19747	20123
Rm^3/h (Reference conditions)	7054	6846	6950
TEMPERATURE (°C)	561	565	563
MOISTURE (% v/v, wet basis)	4.3	4.0	4.2
STATIC PRESSURE (" H2O)	-0.18	-0.18	-0.18
GAS COMPOSITION (dry basis)			
O2 (% v/v)	13.75	13.60	13.68
CO2 (% v/v)	4.65	2.91	3.78
CO (ppmv)	10	22	16
AVERAGE ISOKINETICITY (%)	98.0	97.0	97.5

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

TABLE # 6

OUTLET OF INCINERATOR
EMISSIONS OF PCDD/PCDF

TEST # 1

PROJECT: R12-089
COMPANY: AGNICO-EAGLE MINES LTD,
SITE: OUTLET OF INCINERATOR
DATE: October 2, 2012

GAS SAMPLE VOLUME: 3.985 Rm³
VOLUMETRIC FLOW RATE: 7054 Rm³/h
OXYGEN (O2): 13.75 % v/v, dry basis

CONGENERS	ANALYSES (1) pg	BLANK (2) pg	TOXIC (4) FACTOR	TEQ (3) pg	CONCENTRATIONS pg/Rm³ TEQ (3)	EMISSIONS (TEQ) pg/s (3)
2,3,7,8-T4CDF without DB-225	17.7	< 0.5	0.1	1.77	0.44	0.87
1,2,3,7,8-P5CDF	19.7	< 0.7	0.05	0.99	0.25	0.48
2,3,4,7,8-P5CDF	56.8	0.8	0.5	28.40	7.13	13.97
1,2,3,4,7,8-H6CDF	100.0	1.8	0.1	10.00	2.51	4.92
1,2,3,6,7,8-H6CDF	41.1	1.0	0.1	4.11	1.03	2.02
2,3,4,6,7,8-H6CDF	83.6	1.7	0.1	8.36	2.10	4.11
1,2,3,7,8,9-H6CDF	14.5	< 0.9	0.1	1.45	0.36	0.71
1,2,3,4,6,7,8-H7CDF	137.0	< 1.0	0.01	1.37	0.34	0.67
1,2,3,4,7,8,9-H7CDF	23.0	< 2.0	0.01	0.23	0.06	0.11
1,2,3,4,6,7,8,9-O8CDF	69.7	2.1	0.001	0.07	0.02	0.03
2,3,7,8-T4CDD	< 0.5	< 0.4	1	< 0.50	< 0.13	< 0.25
1,2,3,7,8-P5CDD	28.5	< 0.7	0.5	14.25	3.58	7.01
1,2,3,4,7,8-H6CDD	22.0	< 0.6	0.1	2.20	0.55	1.08
1,2,3,6,7,8-H6CDD	116.0	< 0.6	0.1	11.60	2.91	5.70
1,2,3,7,8,9-H6CDD	185.0	1.0	0.1	18.50	4.64	9.10
1,2,3,4,6,7,8-H7CDD	399.0	2.0	0.01	3.99	1.00	1.96
1,2,3,4,6,7,8,9-O8CDD	217.0	4.4	0.001	0.22	0.05	0.11
TOTAL PCDD/F (5)	1531.1	14.8		108.00	27.10	53.11

HOMOLOGUOUS	ANALYSES pg	BLANK (2) pg
T4CDF	772.0	4.7
P5CDF	671.0	3.9
H6CDF	526.0	6.8
H7CDF	248.0	< 2.0
OCDF	69.7	2.1
T4CDD	463.0	1.5
P5CDD	1400.0	4.9
H6CDD	2180.0	5.1
H7CDD	1170.0	6.0
OCDD	217.0	4.4

NOTES : "R" or "Reference Conditions" correspond to 25 °C, 101.3 kPa, dry basis.
The sign "<" means that the analytical result is less than the detection limit (d.l.).
(1) Analyzed by Agat Laboratories. Results ARE CORRECTED for the recovery of surrogates.
(2) Field blank results are not substracted from the analytical results.
(3) When an analytical result is given as < d.l., the d.l. provided by the laboratory is used in the calculations.
(4) Toxicity factors of method EPS 1/RM/2 of Environment Canada.
(5) When a congener is not detected, the d.l. provided by the laboratory is used in the calculations for total PCDD/F.

TABLE # 7

OUTLET OF INCINERATOR
EMISSIONS OF PCDD/PCDF

TEST # 3

PROJECT: R12-089
COMPANY: AGNICO-EAGLE MINES LTD,
SITE: OUTLET OF INCINERATOR
DATE: October 3, 2012

GAS SAMPLE VOLUME: 3.826 Rm³
VOLUMETRIC FLOW RATE: 6846 Rm³/h
OXYGEN (O2): 13.60 % v/v, dry basis

CONGENERS	ANALYSES (1) pg	BLANK (2) pg	TOXIC (4) FACTOR	TEQ (3) pg	CONCENTRATIONS pg/Rm³ TEQ (3)	EMISSIONS (TEQ) pg/s (3)
2,3,7,8-T4CDF without DB-225	36.4	< 0.5	0.1	3.64	0.95	1.81
1,2,3,7,8-P5CDF	42.0	< 0.7	0.05	2.10	0.55	1.04
2,3,4,7,8-P5CDF	91.0	0.8	0.5	45.50	11.89	22.61
1,2,3,4,7,8-H6CDF	185.0	1.8	0.1	18.50	4.84	9.19
1,2,3,6,7,8-H6CDF	71.0	1.0	0.1	7.10	1.86	3.53
2,3,4,6,7,8-H6CDF	148.0	1.7	0.1	14.80	3.87	7.36
1,2,3,7,8,9-H6CDF	7.0	< 0.9	0.1	0.70	0.18	0.35
1,2,3,4,6,7,8-H7CDF	275.0	< 1.0	0.01	2.75	0.72	1.37
1,2,3,4,7,8,9-H7CDF	38.0	< 2.0	0.01	0.38	0.10	0.19
1,2,3,4,6,7,8,9-O8CDF	130.0	2.1	0.001	0.13	0.03	0.06
2,3,7,8-T4CDD	4.5	< 0.4	1	4.50	1.18	2.24
1,2,3,7,8-P5CDD	17.3	< 0.7	0.5	8.65	2.26	4.30
1,2,3,4,7,8-H6CDD	13.1	< 0.6	0.1	1.31	0.34	0.65
1,2,3,6,7,8-H6CDD	27.2	< 0.6	0.1	2.72	0.71	1.35
1,2,3,7,8,9-H6CDD	45.7	1.0	0.1	4.57	1.19	2.27
1,2,3,4,6,7,8-H7CDD	160.0	2.0	0.01	1.60	0.42	0.80
1,2,3,4,6,7,8,9-O8CDD	273.0	4.4	0.001	0.27	0.07	0.14
TOTAL PCDD/F (5)	1564.2	14.8		119.22	31.16	59.25

HOMOLOGUOUS	ANALYSES pg	BLANK (2) pg
T4CDF	994.0	4.7
P5CDF	913.0	3.9
H6CDF	769.0	6.8
H7CDF	456.0	< 2.0
OCDF	130.0	2.1
T4CDD	159.0	1.5
P5CDD	315.0	4.9
H6CDD	376.0	5.1
H7CDD	327.0	6.0
OCDD	273.0	4.4

NOTES : "R" or "Reference Conditions" correspond to 25 °C, 101.3 kPa, dry basis.
The sign "<" means that the analytical result is less than the detection limit (d.l.).
(1) Analyzed by Agat Laboratories. Results ARE CORRECTED for the recovery of surrogates.
(2) Field blank results are not substracted from the analytical results.
(3) When an analytical result is given as < d.l., the d.l. provided by the laboratory is used in the calculations.
(4) Toxicity factors of method EPS 1/RM/2 of Environment Canada.
(5) When a congener is not detected, the d.l. provided by the laboratory is used in the calculations for total PCDD/F.

Report signatories and approval

Author	Pierre Duguay – P. Eng. - Supervisor
Approbation	Claude Bélanger, chemist – Operations Manager

APPENDIX 1 OUTLET OF THE INCINERATOR

PAM TESTS

DATA REDUCTION COMPUTER PRINT-OUTS Pages A1-1 to A1-4
FIELD SAMPLING DATA SHEETS Pages A1-5 to A1-14
SAMPLING EQUIPMENT CALIBRATION REPORTS Pages A1-15 and A1-16

SVOC TESTS

DATA REDUCTION COMPUTER PRINT-OUTS Pages A1-17 to A1-20
FIELD SAMPLING DATA SHEETS Pages A1-21 to A1-28
SAMPLING EQUIPMENT CALIBRATION REPORTS Pages A1-29 and A1-30

ANALYTICAL REPORTS

CODIFICATION OF SAMPLES Pages A1-31 to A1-33
SVOC PROOFING RESULTS Pages A1-34 to A1-40
PM ANALYTICAL RESULTS Page A1-41
HCl / METALS ANALYTICAL RESULTS Pages A1-42 to A1-76
SVOC ANALYTICAL RESULTS Pages A1-77 to A1-83

APPENDIX 1 OUTLET OF THE INCINERATOR

PAM TESTS

DATA REDUCTION COMPUTER PRINT-OUTS	Pages A1-1 to A1-4
FIELD SAMPLING DATA SHEETS	Pages A1-5 to A1-14
SAMPLING EQUIPMENT CALIBRATION REPORTS	Pages A1-15 and A1-16

SVOC TESTS

DATA REDUCTION COMPUTER PRINT-OUTS	Pages A1-17 to A1-20
FIELD SAMPLING DATA SHEETS	Pages A1-21 to A1-28
SAMPLING EQUIPMENT CALIBRATION REPORTS	Pages A1-29 and A1-30

ANALYTICAL REPORTS

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SVOC ANALYTICAL RESULTS	Pages A1-77 to A1-83

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
PAM

Test	Date	Time	Filter	Probe	Cyclone	Vmeter	Dstack	Period
---	----	--------	mg	mg	mg	ft³	inches	minutes
1	October 2, 2012	15:15 - 18:30	49.37	3.15		146.88	38.00	5

O2 (% v/v) Dry basis	CO2 (% v/v) Dry basis	CO (ppmv) Dry basis	Vol. water mL	Pbar "Hg	Dnozzle inch	Cpitot ----	γ ----	Pstatic "H2O
13.75	4.65	9.5	97.9	30.10	0.540	0.816	0.9862	-0.18

SO2	H2
0	0

Traverse #1

Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1032	0.080	1.48	15.00	71	70	98.2	25.8
	1032	0.080	1.48	19.21	71	70		
2	1032	0.080	1.48	19.21	72	70	97.7	25.8
	1032	0.080	1.48	23.40	72	70		
3	1032	0.080	1.48	23.40	74	70	95.4	25.8
	1032	0.080	1.48	27.50	74	70		
4	1032	0.080	1.48	27.50	75	71	97.5	25.8
	1032	0.080	1.48	31.70	75	71		
5	1040	0.080	1.48	31.70	75	71	98.9	25.9
	1040	0.080	1.48	35.95	75	71		
6	1040	0.080	1.48	35.95	76	71	99.1	25.9
	1040	0.080	1.48	40.21	76	71		
7	1040	0.060	1.11	40.21	76	74	97.9	22.4
	1040	0.060	1.11	43.87	76	74		
8	1045	0.060	1.11	43.87	77	74	97.2	22.5
	1045	0.060	1.11	47.50	77	74		
9	1045	0.060	1.11	47.50	77	76	98.1	22.5
	1045	0.060	1.11	51.17	77	76		
10	1045	0.060	1.11	51.17	78	76	98.8	22.5
	1045	0.060	1.11	54.87	78	76		
11	1045	0.080	1.48	54.87	78	77	98.3	25.9
	1045	0.080	1.48	59.12	78	77		
12	1048	0.080	1.48	59.12	78	77	99.1	26.0
	1048	0.080	1.48	63.40	78	77		
13	1048	0.080	1.44	63.40	78	77	99.8	26.0
	1048	0.080	1.44	67.71	78	77		
14	1048	0.080	1.44	67.71	79	77	99.0	26.0
	1048	0.080	1.44	71.99	79	77		
15	1045	0.080	1.44	71.99	79	78	97.4	25.9
	1045	0.080	1.44	76.21	79	78		
16	1045	0.080	1.44	76.21	79	78	96.9	25.9
	1045	0.080	1.44	80.41	79	78		
17	1050	0.080	1.44	80.41	80	80	98.2	26.0
	1050	0.080	1.44	84.67	80	80		
18	1050	0.080	1.43	84.67	80	80	97.1	26.0
	1050	0.080	1.43	88.88	80	80		
Average	1042	0.076	1.384	73.88	77	75	98.0	25.1

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
PAM

Test #1, Traverse #2								
Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1045	0.060	1.08	89.00	79	77	95.9	22.5
	1045	0.060	1.08	92.60	79	77		
2	1045	0.060	1.08	92.60	79	78	96.1	22.5
	1045	0.060	1.08	96.21	79	78		
3	1045	0.060	1.08	96.21	79	78	95.1	22.5
	1045	0.060	1.08	99.78	79	78		
4	1045	0.060	1.08	99.78	80	79	96.2	22.5
	1045	0.060	1.08	103.40	80	79		
5	1055	0.080	1.43	103.40	81	79	98.6	26.0
	1055	0.080	1.43	107.67	81	79		
6	1055	0.080	1.43	107.67	81	80	99.9	26.0
	1055	0.080	1.43	112.00	81	80		
7	1056	0.070	1.25	112.00	82	80	96.8	24.4
	1056	0.070	1.25	115.93	82	80		
8	1056	0.070	1.25	115.93	83	81	97.1	24.4
	1056	0.070	1.25	119.88	83	81		
9	1060	0.070	1.25	119.88	84	81	96.9	24.4
	1060	0.070	1.25	123.82	84	81		
10	1060	0.070	1.25	123.82	85	81	97.3	24.4
	1060	0.070	1.25	127.78	85	81		
11	1060	0.080	1.43	127.78	86	81	97.0	26.1
	1060	0.080	1.43	132.00	86	81		
12	1060	0.080	1.44	132.00	87	81	98.0	26.1
	1060	0.080	1.44	136.27	87	81		
13	1047	0.080	1.45	136.27	88	82	97.7	26.0
	1047	0.080	1.45	140.55	88	82		
14	1047	0.080	1.45	140.55	89	82	97.3	26.0
	1047	0.080	1.45	144.82	89	82		
15	1047	0.080	1.46	144.82	90	84	97.5	26.0
	1047	0.080	1.46	149.11	90	84		
16	1054	0.080	1.45	149.11	91	84	98.4	26.0
	1054	0.080	1.45	153.43	91	84		
17	1054	0.080	1.45	153.43	92	85	96.4	26.0
	1054	0.080	1.45	157.67	92	85		
18	1054	0.080	1.45	157.67	92	86	98.3	26.0
	1054	0.080	1.45	162.00	92	86		
Average	1053	0.073	1.320	73.00	85	81	97.3	24.9
Ave. test	1047	0.074	1.352	146.88	81	78	97.6	25.0

Velocity		Volumetric flow rates				Temperature		Moisture
ft/s	m/s	ACFM	SDCFM	m³/h	Rm³/h	°F	°C	% v/v
25.0	7.6	11815	4100	20075	6967	1047	564	3.1

Total part.	Gas sample volume		Verification of Isokinetic					
mg	SDCF	Rm³	Nb readings	Nb non Iso	Nb < 90%	Nb > 110%	Iso max.	Iso min.
52.52	145.57	4.122	36	0	0	0	99.9	95.1

Pstack "Hg	Pmeter "Hg	Md g/g-mole	Ms g/g-mole	Bwo ------	Ratio Vs max / Vs min ------	Vs max. ft/s	Vs min. ft/s
30.09	30.20	29.29	28.94	0.031	1.2	26.1	22.4

Particulate concentrations				Emission mass flow rate	
gr/ACF	gr/SDCF	mg/m³	mg/Rm³	lb/h	kg/h
0.002	0.006	4	13	0.2	0.1

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

A1-2

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
PAM

Test	Date	Time	Filter	Probe	Cyclone	Vmeter	Dstack	Period
---	----	--------	mg	mg	mg	ft³	inches	minutes
3	October 3, 2012	15:20 - 18:40	59.31	4.68		145.61	38.00	5

O2 (% v/v) Dry basis	CO2 (% v/v) Dry basis	CO (ppmv) Dry basis	Vol. water mL	Pbar "Hg	Dnozzle inch	Cpitot ----	γ ----	Pstatic "H2O
13.60	2.91	22.1	140.5	30.39	0.540	0.816	0.9862	-0.18

SO2	H2
0	0

Traverse #1

Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1042	0.070	1.20	170.09	74	74	98.9	24.3
	1042	0.070	1.20	174.03	74	74		
2	1042	0.070	1.20	174.03	74	74	100.2	24.3
	1042	0.070	1.20	178.02	74	74		
3	1042	0.080	1.44	178.02	71	74	98.8	26.0
	1042	0.080	1.44	182.21	71	74		
4	1042	0.080	1.44	182.21	71	74	100.9	26.0
	1042	0.080	1.44	186.49	71	74		
5	1076	0.080	1.44	186.49	72	75	99.4	26.3
	1076	0.080	1.44	190.67	72	75		
6	1070	0.080	1.44	190.67	73	75	98.9	26.2
	1070	0.080	1.44	194.84	73	75		
7	1070	0.060	1.10	194.84	74	75	100.9	22.7
	1070	0.060	1.10	198.53	74	75		
8	1070	0.060	1.10	198.53	75	75	99.7	22.7
	1070	0.060	1.10	202.18	75	75		
9	1070	0.060	1.10	202.18	76	76	100.1	22.7
	1070	0.060	1.10	205.85	76	76		
10	1072	0.060	1.10	205.85	77	76	99.2	22.7
	1072	0.060	1.10	209.49	77	76		
11	1071	0.080	1.45	209.49	78	77	99.3	26.2
	1071	0.080	1.45	213.70	78	77		
12	1072	0.080	1.45	213.70	79	78	99.3	26.2
	1072	0.080	1.45	217.92	79	78		
13	1073	0.080	1.46	217.92	80	78	98.3	26.2
	1073	0.080	1.46	222.10	80	78		
14	1073	0.080	1.46	222.10	81	78	98.7	26.2
	1073	0.080	1.46	226.30	81	78		
15	1074	0.080	1.46	226.30	82	78	98.4	26.3
	1074	0.080	1.46	230.49	82	78		
16	1074	0.080	1.46	230.49	82	78	98.2	26.3
	1074	0.080	1.46	234.67	82	78		
17	1075	0.070	1.28	234.67	83	78	100.1	24.6
	1075	0.070	1.28	238.66	83	78		
18	1077	0.070	1.28	238.66	84	78	99.3	24.6
	1077	0.070	1.28	242.62	84	78		

Average	1066	0.073	1.326	72.53	77	76	99.4	25.0

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
PAM

Test #3, Traverse #2								
Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1056	0.060	1.10	242.79	75	74	98.3	22.6
	1056	0.060	1.10	246.40	75	74		
2	1067	0.060	1.10	246.40	76	74	98.5	22.7
	1067	0.060	1.10	250.01	76	74		
3	1065	0.060	1.10	250.01	78	75	98.2	22.7
	1065	0.060	1.10	253.62	78	75		
4	1056	0.060	1.10	253.62	78	75	97.9	22.6
	1056	0.060	1.10	257.23	78	75		
5	1056	0.080	1.49	257.23	79	76	98.1	26.1
	1056	0.080	1.49	261.41	79	76		
6	1040	0.080	1.49	261.41	79	76	98.5	26.0
	1040	0.080	1.49	265.63	79	76		
7	1040	0.070	1.30	265.63	79	76	100.2	24.3
	1040	0.070	1.30	269.65	79	76		
8	1040	0.070	1.30	269.65	80	76	100.4	24.3
	1040	0.070	1.30	273.68	80	76		
9	1040	0.070	1.30	273.68	80	76	100.4	24.3
	1040	0.070	1.30	277.71	80	76		
10	1036	0.070	1.30	277.71	80	76	100.5	24.3
	1036	0.070	1.30	281.75	80	76		
11	1036	0.080	1.50	281.75	80	77	97.9	25.9
	1036	0.080	1.50	285.96	80	77		
12	1036	0.080	1.50	285.96	81	78	98.2	25.9
	1036	0.080	1.50	290.19	81	78		
13	1042	0.080	1.50	290.19	81	78	100.5	26.0
	1042	0.080	1.50	294.51	81	78		
14	1045	0.080	1.50	294.51	81	78	102.7	26.0
	1045	0.080	1.50	298.92	81	78		
15	1045	0.080	1.50	298.92	81	78	99.2	26.0
	1045	0.080	1.50	303.18	81	78		
16	1045	0.080	1.50	303.18	81	78	98.1	26.0
	1045	0.080	1.50	307.39	81	78		
17	1054	0.080	1.50	307.39	81	78	98.6	26.1
	1054	0.080	1.50	311.61	81	78		
18	1054	0.080	1.50	311.61	81	79	99.4	26.1
	1054	0.080	1.50	315.87	81	79		
Average	1047	0.073	1.366	73.08	80	77	99.2	24.9
Ave. test	1057	0.073	1.346	145.61	78	76	99.3	25.0

Velocity		Volumetric flow rates				Temperature		Moisture
ft/s	m/s	ACFM	SDCFM	m³/h	Rm³/h	°F	°C	% v/v
25.0	7.6	11790	4052	20034	6885	1057	569	4.4

Total part.	Gas sample volume		Verification of Isokinetic					
mg	SDCF	Rm³	Nb readings	Nb non Iso	Nb < 90%	Nb > 110%	Iso max.	Iso min.
63.99	146.27	4.142	36	0	0	0	102.7	97.9

Pstack "Hg	Pmeter "Hg	Md g/g-mole	Ms g/g-mole	Bwo ------	Ratio Vs max / Vs min ------	Vs max. ft/s	Vs min. ft/s
30.38	30.49	29.01	28.52	0.044	1.2	26.3	22.6

Particulate concentrations				Emission mass flow rate	
gr/ACF	gr/SDCF	mg/m³	mg/Rm³	lb/h	kg/h
0.002	0.007	5	15	0.2	0.1

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

Exova Canada Inc.
1390 Rue Hocquart
St-Bruno-de-Montarville
Québec Canada J3V 6E1

Exova

DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : [illegible]	Contrôle: # [illegible] γ = 0,9862 Ko = 0,885	Conduit: Dia ("): 38	Porte ("): 0
Endroit: [illegible]	Sonde: # [illegible] Cv = 0,816	Diamètre: Av: 6	Ap: 2
Date: 08-10-12 / Projet: R	Buse: # Dn = 0,190 Caisson #	Feuille : 1 de 3	
Site : [illegible]	Humidité supposée % = 6	Fuite Avant: 0,000 "H2O @ 15 "Hg	
Essai: [illegible] PAM	Pression: Pbar ("Hg) = 30 Pstat ("H2O) = -0,18	Fuite Après: "H2O @ "Hg	

Point	Heure	TS (°F)	ΔP (" H2O)	ΔH (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
1	15:15	1032	0,08	1,18	15,60	71	70	54	250	250	-5	92				
		1032	0,08	1,18		71	70									
2	15:20	1032	0,08	1,18	19,21	72	70				-5	101				
		1032	0,08	1,18		72	70									
3	15:25	1036	0,08	1,18	23,40	74	70				-5	99	13,8	4,6	12	
		1032	0,08	1,18		74	70									
4	15:30	1032	0,08	1,18	27,70	75	71	50	256	250	-5	101				
		1032	0,08	1,18		75	71									
5	15:35	1040	0,08	1,18	31,20	75	71				-5	108				
		1040	0,08	1,18		75	71									
6	15:40	1040	0,08	1,18	35,91	76	71				-5	103				
		1040	0,08	1,18		76	71									
7	15:45	1040	0,06	1,11	40,21	76	74	56	255	250	-5	101				
		1041	0,06	1,11		76	74									
8	15:50	1045	0,06	1,11	43,82	77	74				-5	101	13,8	4,6	10	
		1045	0,06	1,11		77	74									
9	15:55	1045	0,06	1,11	47,70	77	76				-5	102				
		1045	0,06	1,11		77	76									
10	16:00	1045	0,06	1,11	51,15	78	76	58	250	250	-5	102				
		1045	0,06	1,11		78	76									
11	16:05	1045	0,08	1,18	54,84	78	77				-5	103				
		1045	0,08	1,18		78	77									
12	16:10	1048	0,08	1,18	59,12	78	77				-5	105				
	16:15	1048	0,08	1,18	63,40	78	77									

Constante => K = 50,5 A% = 93,28

Échantillonneur: BR

Assistant à l'échantillonneur: ROR

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie :	Contrôle: # γ = Ko =	Conduit: Dia (") Porte (")
Endroit:	Sonde: # Cv =	Diamètre: Av: Ap:
Date: / Projet: R	Buse: # Dn = Caisson #	Feuille : de
Site :	Humidité supposée % =	Fuite Avant: "H2O @ "Hg
Essai:	Pression: Pbar ("Hg) = Pstat ("H2O) =	Fuite Après: "H2O @ "Hg

Point	Heure	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
12	1:30	1048	0.08	1.44	63.40	38	39	54	138	141	-6	103				
		1048	0.08	1.44		38	39		138	141						
13	1:35	1048	0.08	1.44	67.91	39	39		139	141	-6	102	13.7	4.7	10	
		1048	0.08	1.44		39	39		139	141						
14	1:40	1045	0.08	1.44	71.99	39	38	54	139	142	-6	101				
		1045	0.08	1.44		39	38		139	142						
15	1:45	1045	0.08	1.44	76.21	39	38		139	142	-6	100				
		1045	0.08	1.44		39	38		139	142						
16	1:50	1050	0.08	1.44	80.4	40	40		140	143	-6	102				
		1050	0.08	1.44		40	40		140	143						
17	1:55	1050	0.08	1.43	84.69	40	40	52	138	140	-6	100				
	2:00	1050	0.08	1.43	88.88	40	40		140	142						
1	0:00	1045	0.06	1.03	89.00				39	37	-2	99				
		1045	0.06	1.03					39	37						
2	0:05	1045	0.06	1.03	93.10			54	39	38	-2	100				
		1045	0.06	1.03					39	38						
3	0:10	1045	0.06	1.03	96.21				39	38	-2	99	13.7	4.7	8	
		1045	0.06	1.03					39	38						
4	0:15	1045	0.06	1.03	99.38			54	40	39	-2	100				
		1045	0.06	1.03					40	39						
5	0:20	1045	0.08	1.43	103.40				40	39	-2	102				
		1045	0.08	1.43					40	39						
6	0:25	1045	0.08	1.43	107.63			54	41	40	-2	103				
	0:30	1045	0.08	1.43	112.00				41	42						

Constante => K = A% =

Échantillonneur: BB Assistant à l'échantillonneur: ROP

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : Agnico Eagle	Contrôle: #SB LI γ = 0.9862 Ko = 0.9852	Conduit: Dia ("): 38" Porte (") 10"
Endroit: Nunavut	Sonde: #2 F Cv = 0.816	Diamètre: Av: 6 Ap: 12
Date: 02-10-2012 / Projet: R12-089	Buse: # Dn = .540 Caisson #	Feuille : 3 de 3
Site : Meadowbank	Humidité supposée % = 6	Fuite Avant: "H2O @ "Hg
Essai: # 1 PAM	Pression: Pbar ("Hg) = 30 Pstat ("H2O) = -0.18	Fuite Après: 0,00 "H2O @ 15 "Hg

Point	Heure	TS (°F)	ΔP (" H2O)	ΔH (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
7	17:30	1056	0.07	1.25	112.00	82	80	54	251	250	-14	100				
		1056	0.07	1.25		82	80									
8	17:35	1056	0.07	1.25	115.93	83	81				-14	104	13.8	4.6	5	
		1056	0.07	1.25		83	81									
9	17:40	1060	0.07	1.25	119.88	84	81				-14	105				
		1060	0.07	1.25		84	81									
10	17:45	1060	0.07	1.25	123.82	85	81	55	250	250	-14	100				
		1060	0.07	1.25		85	81									
11	17:50	1060	0.08	1.43	127.78	86	81				-14	103				
		1060	0.08	1.43		86	81									
12	17:55	1060	0.08	1.44	132.00	87	81				-14	98				
		1060	0.08	1.44		87	81									
13	18:00	1047	0.08	1.45	136.27	88	82	57	250	250	-15	100	13.2	4.7	12	
		1047	0.08	1.45		88	82									
14	18:05	1047	0.08	1.45	140.55	89	82				-15	102				
		1047	0.08	1.45		89	82									
15	18:10	1047	0.08	1.46	144.82	90	84				-15	102				
		1047	0.08	1.46		90	84									
16	18:15	1054	0.08	1.45	149.11	91	84	56	250	250	-15	99				
		1054	0.08	1.45		91	84									
17	18:20	1054	0.08	1.45	153.43	92	85				-15	100				
		1054	0.08	1.45		92	85									
18	18:25	1054	0.08	1.45	157.69	92	86				-15	101				
	18:30	1054	0.08	1.45		92	86									
					162.00	Constante => K = 50.15						A% = 93.78				

Échantillonneur: BB

Assistant à l'échantillonneur: R & B

WEIGHT SHEET

Company	Agnico-Eagle
Location	Baker Lake
Date	03 / 10 / 2012
Site	Outlet incinerator
Train #	
Test #	#1 / PAM

DATA			
Pbar: 30.10 po.Hg			
G	O_2	%	13.75
	CO_2	%	4.65
A	CO	ppm	9.5
Z	CO	%	

	No.	Weight Final (g)	Weight Initial (g)	Weight Particulates
Filter	Q-189		0.5156	
Probe wash				
Cyclone				
			Weight (g)	

Impingers		Final weight	Initial weight	Water weight
1	H2O	599.1	514.6	42.5
2	~~H2O~~ Vide	512.8	512.3	0.5
3	HNO_3 5% /H_2O_2 10 %	602.1	579.3	22.8
4	HNO_3 5% /H_2O_2 10 %	569.8	563.0	6.8
5	Empty	405.6	399.0	6.6
6	$KMnO_4$ 4%/ H_2SO_4 10%	544.5	544.1	0.4
7	$KMnO_4$ 4%/ H_2SO_4 10%	639.7	639.7	0.0
8	Silica gel	629.0	604.4	24.6
			Final weight	93.9

Preparation	Prepared by	Recovered by	Approved by
Date		03-10-12	
On site		BB	
Laboratory		KP	

A1-8

Gestion des volumes des Barboteurs

Barboteur #	Volume d'eau Condensé	Volume de solution Initiale	Total	Code
1	[illegible] mL	+ 100 mL	[illegible] mL(1)	
2	[illegible] mL	+ 100 mL	[illegible] mL(2)	
Rinçage (poids)	g	g	31 mL(3)	1 g d'eau = 1 mL
Sous total (1+2+3)			[illegible] mL(4)	
Aliquot **(Contenant 3B)**			(-) 100 mL(5)	___OCT12-A1-PAM-INC-(1+2-A)-12089.44
Volume final (4-5)			2[illegible] mL(6)	
Divise par 20			divise par 20 (7)	
Volume d'acide HNO_3 conc. à ajouter			3.2 mL(8)	
Volume final (5+6+8) **(Contenant 3A)**			177.7 mL(9)	_____OCT12-A1-PAM-INC-(1+2-M1)-12089.45 OCT12-A1-PAM-INC-(1+2-M2)-12089.46

3	[illegible] mL	+ 100 mL	[illegible] mL(10)	
4	[illegible] mL	+ 100 mL	[illegible] mL(11)	
Rinçage (poids)	g	g	23 mL(12)	
Total (10 + 11 + 12) **(Contenant 4)**			[illegible] mL(13)	_____OCT12-A1-PAM-INC-(3+4-RM)-12089.47

5	[illegible] mL	+ 0 mL	[illegible] mL(14)	
Rinçage (poids)	g	g	0 mL(15)	
Total (14 + 15) **(Contenant 5 A)**			43 mL(16)	_____OCT12-A1-PAM-INC-(5)-12089.48

6	[illegible] mL	+ 100 mL	100.4 mL(17)	
7	[illegible] mL	+ 100 mL	100 mL(18)	
Rinçage ($KMnO_4$)	g	g	39.9 mL(19)	g $KMnO_4$/ 1.124 g/mL = mL $KMnO_4$
Rinçage (H_2O)	g	g	[illegible] mL(20)	
Total (17 + 18 + 19+ 20) **(Contenant 5 B)**			[illegible] mL(21)	_____OCT12-A1-PAM-INC-(6+7)-12089.49

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : [illegible]	Contrôle: # [illegible] γ = [illegible] Ko = [illegible]	Conduit: Dia ("): [illegible] Porte (") [illegible]
Endroit: [illegible]	Sonde: # [illegible] Cv = [illegible]16	Diamètre: Av: [illegible] Ap: [illegible]
Date: [illegible] / Projet: R	Buse: # Dn = [illegible] Caisson #	Feuille : [illegible] de [illegible]
Site : [illegible]	Humidité supposée % = [illegible]	Fuite Avant: [illegible] "H2O @ [illegible] "Hg
Essai: [illegible]	Pression: Pbar ("Hg) = [illegible] Pstat ("H2O) = [illegible]	Fuite Après: "H2O @ "Hg

Point	Heure	TS	ΔP	ΔH	Volume	Température					Vacuum	% ISO	Gaz			
		(°F)	(" H2O)	(" H2O)	(pi³)	Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	(" Hg)	(%)	O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
	[illegible]				[illegible]	[illegible]	[illegible]									

Constante => K = [illegible] A% = [illegible]

Échantillonneur: [illegible]   Assistant à l'échantillonneur: [illegible]

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie :	Contrôle: # γ = Ko =	Conduit: Dia ("): Porte (")
Endroit:	Sonde: # Cv =	Diamètre: Av: Ap:
Date: / Projet: R	Buse: # Dn = Caisson #	Feuille : de
Site :	Humidité supposée % =	Fuite Avant: "H2O @ "Hg
Essai:	Pression: Pbar ("Hg) = Pstat ("H2O) =	Fuite Après: "H2O @ "Hg

Point	Heure	TS	ΔP	ΔH	Volume	Température					Vacuum	% ISO	Gaz			
		(°F)	(" H2O)	(" H2O)	(pi³)	Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	(" Hg)	(%)	O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv

Constante => K = A% =

Échantillonneur: ____________ Assistant à l'échantillonneur: ____________

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : [illegible]	Contrôle: # [illegible] γ = [illegible] Ko = [illegible]	Conduit: Dia ("): [illegible] Porte ("): [illegible]
Endroit: [illegible]	Sonde: # [illegible] Cv = [illegible]16	Diamètre: Av: [illegible] Ap: [illegible]
Date: [illegible] / Projet: R	Buse: # Dn = [illegible] Caisson #	Feuille : [illegible] de [illegible]
Site : [illegible]	Humidité supposée % = [illegible]	Fuite Avant: [illegible] "H2O @ "Hg
Essai: [illegible]	Pression: Pbar ("Hg) = [illegible] Pstat ("H2O) = [illegible]	Fuite Après: "H2O @ "Hg

Point	Heure	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (pi³)	Température: Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz: O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]				
						[illegible]	[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]				
	[illegible]				[illegible]		[illegible]									

	Constante => K =	A% =

A1 - 12

Échantillonneur: [illegible]   Assistant à l'échantillonneur: [illegible]

F-1

WEIGHT SHEET

Company	Agnico-Eagle
Location	Baker Lake
Date	3 / 10 / 2012
Site	Outlet incinerator
Train #	5
Test #	3 PAM

DATA		
Pbar: 30.39 po.Hg		
G	O_2	% 13.60
	CO_2	% 2.91
A	CO	ppm 22.1
Z	CO	%

	No.	Weight Final (g)	Weight Initial (g)	Weight Particulates
Filter	Q-182		0.5278	
Probe wash				
Cyclone				
			Weight (g)	

Impingers		Final weight (g)	Initial weight (g)	Water weight (g)
1	H2O	573.4	522.5	50.9
2	H2O	550.4	513.6	36.8
3	HNO_3 5% /H_2O_2 10 %	573.5	562.8	10.7
4	HNO_3 5% /H_2O_2 10 %	577.4	575.4	2.0
5	Empty	475.7	475.5	0.2
6	$KMnO_4$ 4%/ H_2SO_4 10%	656.0	540.7	5.3
7	$KMnO_4$ 4%/ H_2SO_4 10%	549.8	549.8	0.0
8	Silica gel	304.4	279.8	24.6
			Final weight (g)	40.5

Preparation	Prepared by	Recovered by	Approved by
Date	3 octobre	3 octobre	
On site	SB		
Laboratory	—	—	

A1-13

#3 métaux

Gestion des volumes des Barboteurs

Barboteur #	Volume d'eau Condensé	Volume de solution Initiale	Total	Code
1	50.4 mL	+ 100 mL	150.4 mL(1)	
2	36.8 mL	~~+ 100 mL~~	36.8 mL(2)	
Rincage (poids)	g	g	63.5 mL(3)	1 g d'eau = 1 mL
Sous-total (1+2+3)			250.2 mL(4)	
Aliquot **(Contenant 3B)**			(-) 100 mL(5)	_____OCT12-A3-PAM-INC-(1+2-A)-12089.64
Volume final (4-5)			150.2 mL(6)	
Divise par 20			divise par 20 (7)	
Volume d'acide HNO_3 conc. à ajouter			7.52 mL(8)	
Volume final (5+6+8) **(Contenant 3A)**	238,8	158.7	mL(9)	_____OCT12-A3-PAM-INC-(1+2-M1)-12089.65 _____OCT12-A3-PAM-INC-(1+2-M2)-12089.66

3	10.7 mL	+ 100 mL	110.7 mL(10)	
4	8 mL	+ 100 mL	102 mL(11)	
Rincage (poids)	g	g	107.5 mL(12)	
Total (10 + 11 + 12) **(Contenant 4)**			330.2 mL(13)	_____OCT12-A3-PAM-INC-(3+4-RM)-12089.67

5	0.2 mL	+ 0 mL	[illegible] mL(14)	
Rincage (poids)	g	g	80 mL(15)	
Total (14 + 15) **(Contenant 5 A)**			80.2 mL(16)	_____OCT12-A3-PAM-INC-(5)-12089.68

6	15.3 mL	+ 100 mL	115.3 mL(17)	
7	0 mL	+ 100 mL	100 mL(18)	
Rincage ($KMnO_4$)	g	g	115.1 mL(19)	g $KMnO_4$/ 1.124 g/mL = mL $KMnO_4$
Rincage (H_2O)	g	g	80 mL(20)	
Total (17 + 18 + 19+ 20) **(Contenant 5 B)**			460.4 mL(21)	_____OCT12-A3-PAM-INC-(6+7)-12089.69

CALIBRATION OF SAMPLING MODULE

Module Identification:	SB_L1
Inventory number:	0
Atmospheric pressure ("Hg) :	29.90

Responsable calibration :	B.BOUCHARD
Responsable data entry:	0
Calibration date:	01-févr-12
Next calibration date:	01-févr-13

del.H in.H2O	Vw ft³	Vd ft³	Tw deg.F	Tdo deg.F	Td deg.F	time min.	del.m in.H2O	factor count.
1.0	5.00	5.24	70.0	88.0	90.0	7.45	-0.30	1.0008
1.0	5.00	5.21	70.0	86.5	85.8	7.45	-0.30	1.0008
1.5	5.00	5.19	70.0	84.5	85.0	6.03	-0.35	1.0008
1.5	5.00	5.20	70.0	84.0	85.0	6.03	-0.35	1.0008
2.0	5.00	5.20	70.0	84.0	85.5	5.15	-0.45	1.0008
2.0	5.00	5.20	70.0	84.0	86.3	5.16	-0.45	1.0008
2.5	10.00	10.37	70.0	84.0	87.3	9.12	-0.50	1.0008
2.5	10.00	10.39	70.0	85.0	88.0	9.12	-0.50	1.0008
3.0	10.00	10.44	70.0	85.5	88.8	8.28	-0.60	1.0008
3.0	10.00	10.45	70.0	86.5	89.8	8.30	-0.60	1.0008

del.H in.H2O	Vwc ft³	K	del.H@ in.H2O	Qm cfm	Ko	gamma	Acceptability criteria 1.50%	yes/no
1.0	5.00	0.7947	1.20	0.6923	0.8711	0.9878	0.16	yes
1.0	5.00	0.7936	1.21	0.6904	0.8699	0.9858	0.04	yes
1.5	5.00	0.9696	1.19	0.8487	0.8753	0.9870	0.07	yes
1.5	5.00	0.9691	1.19	0.8479	0.8749	0.9851	0.12	yes
2.0	5.00	1.1184	1.16	0.9913	0.8864	0.9845	0.18	yes
2.0	5.00	1.1184	1.16	0.9894	0.8847	0.9859	0.04	yes
2.5	10.01	1.2496	1.13	1.1181	0.8947	0.9892	0.30	yes
2.5	10.01	1.2508	1.13	1.1202	0.8956	0.9886	0.24	yes
3.0	10.01	1.3699	1.11	1.2331	0.9001	0.9838	0.25	yes
3.0	10.01	1.3712	1.12	1.2324	0.8988	0.9847	0.16	yes
AVERAGE			1.16	0.9764	0.8852	0.9862		

Reference: Method 1/RM/8

Probe Identification:	2F (EAU)	Calibration date	22-févr-12
Inventory number	0	Calibration technician responsable	S.Demers
		Data prossessing technician responsable	S.Demers
Barometric pressure:	29.76 "Hg		
Ambiant temperature:	70.0 oF	Ms : 28.73	

NOZZLES	SCALE	PITOT REFERENCE del p	PITOT "S" TYPE del p	Vs ft/s	Cv
WITHOUT NOZZLE	1	1.000	1.510	67.308	0.814
	2	0.660	0.993	54.682	0.815
	3	0.518	0.776	48.443	0.817
	4	0.285	0.425	35.933	0.819
	5	0.140	0.205	25.184	0.826
	6	0.050	0.072	15.051	0.833
Dia. 1/8 No. EX5	1	1.000	1.510	67.308	0.814
	2	0.660	0.993	54.682	0.815
	3	0.518	0.776	48.443	0.817
	4	0.285	0.425	35.933	0.819
	5	0.140	0.205	25.184	0.826
	6	0.050	0.072	15.051	0.833
Dia. 3/16 No. EX5	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
	3	0.518	0.802	48.443	0.804
	4	0.285	0.438	35.933	0.807
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
Dia. 1/4 No. EX5	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
	3	0.518	0.803	48.443	0.803
	4	0.285	0.439	35.933	0.806
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
Dia. 5/16 No. EX5	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
	3	0.518	0.804	48.443	0.803
	4	0.285	0.440	35.933	0.805
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
Dia. 3/8 No. EX5	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
	3	0.518	0.804	48.443	0.803
	4	0.285	0.440	35.933	0.805
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
Dia. 7/16 No. EX5	1	1.000	1.590	67.308	0.793
	2	0.660	1.040	54.682	0.797
	3	0.518	0.806	48.443	0.802
	4	0.285	0.441	35.933	0.804
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
Dia. 1/2 No. EX5	1	1.000	1.590	67.308	0.793
	2	0.660	1.040	54.682	0.797
	3	0.518	0.807	48.443	0.801
	4	0.285	0.441	35.933	0.804
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816

NOTICE: Shows the average ot three reading taken during calibration.

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
SVOC

Test	Date	Time	Filter	Probe	Cyclone	Vmeter	Dstack	Period
---	-----	-------	mg	mg	mg	ft³	inches	minutes
1	October 2, 2012	15:30 - 18:40				143.57	38.00	5

O2 (% v/v) Dry basis	CO2 (% v/v) Dry basis	CO (ppmv) Dry basis	Vol. water mL	Pbar "Hg	Dnozzle inch	Cpitot ----	γ ----	Pstatic "H2O
13.75	4.65	9.5	132.1	30.10	0.527	0.816	0.9855	-0.18

SO2	H2
0	0

Traverse #1

Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1057	0.110	1.08	28.00	71	70	94.1	30.6
	1057	0.110	1.08	32.43	71	70		
2	1057	0.110	1.08	32.43	71	70	96.6	30.6
	1057	0.110	1.08	36.98	71	70		
3	1058	0.100	0.99	36.98	72	70	94.1	29.2
	1058	0.100	0.99	41.21	72	70		
4	1058	0.100	0.99	41.21	73	71	95.3	29.2
	1058	0.100	0.99	45.50	73	71		
5	1058	0.100	0.99	45.50	74	71	95.2	29.2
	1058	0.100	0.99	49.79	74	71		
6	1058	0.100	0.99	49.79	75	71	97.8	29.2
	1058	0.100	0.99	54.20	75	71		
7	1023	0.080	0.81	54.20	77	72	98.9	25.8
	1023	0.080	0.81	58.25	77	72		
8	1022	0.080	0.81	58.25	79	72	98.0	25.8
	1022	0.080	0.81	62.27	79	72		
9	1022	0.080	0.81	62.27	82	73	97.8	25.8
	1022	0.080	0.81	66.30	82	73		
10	1022	0.080	0.82	66.30	84	73	96.9	25.8
	1022	0.080	0.82	70.30	84	73		
11	1022	0.080	0.82	70.30	85	74	97.7	25.8
	1022	0.080	0.82	74.34	85	74		
12	1034	0.080	0.82	74.34	86	74	98.5	25.9
	1034	0.080	0.82	78.40	86	74		
13	1000	0.080	0.81	78.40	88	75	98.1	25.6
	1000	0.080	0.81	82.50	88	75		
14	1000	0.080	0.81	82.50	89	76	99.6	25.6
	1000	0.080	0.81	86.67	89	76		
15	1002	0.080	0.81	86.67	90	77	98.0	25.6
	1002	0.080	0.81	90.78	90	77		
16	1002	0.080	0.81	90.78	91	78	98.5	25.6
	1002	0.080	0.81	94.92	91	78		
17	1010	0.060	0.62	94.92	92	79	96.8	22.3
	1010	0.060	0.62	98.44	92	79		
18	1010	0.060	0.62	98.44	93	80	97.7	22.3
	1010	0.060	0.62	102.00	93	80		
Average	1029	0.086	0.861	74.00	82	74	97.2	26.7

A1-17

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
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Test #1, Traverse #2								
Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1006	0.070	0.72	102.21	94	82	98.7	24.0
	1006	0.070	0.72	106.11	94	82		
2	1021	0.070	0.72	106.11	94	83	98.9	24.1
	1021	0.070	0.72	110.00	94	83		
3	1057	0.070	0.72	110.00	94	83	103.2	24.4
	1057	0.070	0.72	114.01	94	83		
4	1062	0.070	0.72	114.01	94	84	97.1	24.5
	1062	0.070	0.72	117.78	94	84		
5	1064	0.060	0.61	117.78	95	84	97.8	22.7
	1064	0.060	0.61	121.30	95	84		
6	1066	0.060	0.61	121.30	95	85	99.8	22.7
	1066	0.060	0.61	124.89	95	85		
7	1056	0.060	0.61	124.89	95	85	97.2	22.6
	1056	0.060	0.61	128.40	95	85		
8	1056	0.090	0.92	128.40	95	86	101.7	27.7
	1056	0.090	0.92	132.90	95	86		
9	1056	0.090	0.92	132.90	95	86	102.9	27.7
	1056	0.090	0.92	137.45	95	86		
10	1067	0.090	0.92	137.45	95	87	97.7	27.8
	1067	0.090	0.92	141.76	95	87		
11	1054	0.090	0.92	141.76	95	88	100.4	27.7
	1054	0.090	0.92	146.21	95	88		
12	1054	0.090	0.92	146.21	96	88	95.5	27.7
	1054	0.090	0.92	150.45	96	88		
13	1060	0.060	0.61	150.45	96	90	97.9	22.6
	1060	0.060	0.61	154.00	96	90		
14	1060	0.060	0.61	154.00	96	90	99.3	22.6
	1060	0.060	0.61	157.60	96	90		
15	1060	0.060	0.61	157.60	96	90	99.6	22.6
	1060	0.060	0.61	161.21	96	90		
16	1060	0.060	0.61	161.21	96	90	96.0	22.6
	1060	0.060	0.61	164.69	96	90		
17	1060	0.060	0.61	164.69	96	90	97.1	22.6
	1060	0.060	0.61	168.21	96	90		
18	1060	0.060	0.61	168.21	96	90	98.5	22.6
	1060	0.060	0.61	171.78	96	90		
Average	1054	0.071	0.721	69.57	95	87	98.8	24.4
Ave. test	1042	0.078	0.791	143.57	88	80	98.0	25.5

Velocity		Volumetric flow rates				Temperature		Moisture
ft/s	m/s	ACFM	SDCFM	m³/h	Rm³/h	°F	°C	% v/v
25.5	7.8	12064	4152	20499	7054	1042	561	4.3

Total part.	Gas sample volume		Verification of Isokinetic					
mg	SDCF	Rm³	Nb readings	Nb non Iso	Nb < 90%	Nb > 110%	Iso max.	Iso min.
0	140.73	3.985	36	0	0	0	103.2	94.1

Pstack "Hg	Pmeter "Hg	Md g/g-mole	Ms g/g-mole	Bwo ------	Ratio Vs max / Vs min ------	Vs max. ft/s	Vs min. ft/s
30.09	30.16	29.29	28.81	0.043	1.4	30.6	22.3

Particulate concentrations				Emission mass flow rate	
gr/ACF	gr/SDCF	mg/m³	mg/Rm³	lb/h	kg/h
0.000	0.000	0	0	0.0	0.0

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

A1-18

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
OUTLET OF INCINERATOR
SVOC

Test	Date	Time	Filter	Probe	Cyclone	Vmeter	Dstack	Period
---	----	-------	mg	mg	mg	ft^3	inches	minutes
3	October 3, 2012	15:15 - 18:30				136.28	38.00	5

O2 (% v/v) Dry basis	CO2 (% v/v) Dry basis	CO (ppmv) Dry basis	Vol. water mL	Pbar "Hg	Dnozzle inch	Cpitot ----	γ ----	Pstatic "H2O
13.60	2.91	22.1	118.6	30.39	0.527	0.816	0.9855	-0.18

SO2	H2
0	0

Traverse #1

Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft^3	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1054	0.100	1.00	203.04	76	75	95.2	29.1
	1054	0.100	1.00	207.37	76	75		
2	1050	0.100	1.00	207.37	76	76	95.0	29.1
	1050	0.100	1.00	211.70	76	76		
3	1061	0.100	1.00	211.70	77	77	94.3	29.2
	1061	0.100	1.00	215.99	77	77		
4	1061	0.080	0.80	215.99	77	78	98.4	26.1
	1061	0.080	0.80	220.00	77	78		
5	1061	0.080	0.80	220.00	77	79	96.8	26.1
	1061	0.080	0.80	223.95	77	79		
6	1057	0.080	0.80	223.95	78	79	96.4	26.1
	1057	0.080	0.80	227.89	78	79		
7	1056	0.080	0.80	227.89	78	80	97.2	26.1
	1056	0.080	0.80	231.87	78	80		
8	1056	0.080	0.80	231.87	78	80	96.7	26.1
	1056	0.080	0.80	235.83	78	80		
9	1057	0.080	0.80	235.83	78	80	95.8	26.1
	1057	0.080	0.80	239.75	78	80		
10	1057	0.080	0.80	239.75	79	81	96.4	26.1
	1057	0.080	0.80	243.70	79	81		
11	1057	0.080	0.80	243.70	79	81	93.9	26.1
	1057	0.080	0.80	247.55	79	81		
12	1057	0.070	0.70	247.55	80	81	99.2	24.4
	1057	0.070	0.70	251.36	80	81		
13	1057	0.070	0.70	251.36	84	81	97.1	24.4
	1057	0.070	0.70	255.10	84	81		
14	1057	0.070	0.70	255.10	84	81	96.5	24.4
	1057	0.070	0.70	258.82	84	81		
15	1057	0.070	0.71	258.82	86	81	97.4	24.4
	1057	0.070	0.71	262.58	86	81		
16	1058	0.070	0.71	262.58	87	81	97.3	24.4
	1058	0.070	0.71	266.34	87	81		
17	1060	0.060	0.60	266.34	88	82	98.3	22.6
	1060	0.060	0.60	269.86	88	82		
18	1068	0.060	0.60	269.86	89	83	100.3	22.7
	1068	0.060	0.60	273.45	89	83		

Average	1058	0.078	0.784	70.41	81	80	96.8	25.8

AGNICO-EAGLE MINES LTD, MEADOWBANK DIVISION
BAKER LAKE, NUNAVUT
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Test #3, Traverse #2								
Point	Tstack °F	ΔP "H2O	ΔH "H2O	Volume ft³	Tinlet °F	Toutlet °F	Isokinetic %	Velocity ft/s
1	1040	0.060	0.61	273.60	85	83	97.0	22.5
	1040	0.060	0.61	277.09	85	83		
2	1044	0.060	0.61	277.09	85	83	97.7	22.5
	1044	0.060	0.61	280.60	85	83		
3	1050	0.060	0.61	280.60	85	83	98.1	22.5
	1050	0.060	0.61	284.12	85	83		
4	1051	0.060	0.61	284.12	86	83	97.3	22.5
	1051	0.060	0.61	287.61	86	83		
5	1042	0.060	0.61	287.61	86	84	97.4	22.5
	1042	0.060	0.61	291.12	86	84		
6	1042	0.060	0.61	291.12	86	84	96.9	22.5
	1042	0.060	0.61	294.61	86	84		
7	1043	0.060	0.61	294.61	87	84	97.1	22.5
	1043	0.060	0.61	298.11	87	84		
8	1041	0.080	0.81	298.11	87	84	96.3	26.0
	1041	0.080	0.81	302.12	87	84		
9	1042	0.080	0.81	302.12	87	85	95.1	26.0
	1042	0.080	0.81	306.08	87	85		
10	1042	0.080	0.81	306.08	88	85	95.9	26.0
	1042	0.080	0.81	310.08	88	85		
11	1034	0.080	0.81	310.08	88	85	97.1	25.9
	1034	0.080	0.81	314.14	88	85		
12	1034	0.080	0.81	314.14	88	85	95.2	25.9
	1034	0.080	0.81	318.12	88	85		
13	1035	0.060	0.62	318.12	89	86	98.7	22.4
	1035	0.060	0.62	321.70	89	86		
14	1036	0.060	0.62	321.70	89	86	98.7	22.4
	1036	0.060	0.62	325.28	89	86		
15	1038	0.060	0.62	325.28	89	86	99.9	22.5
	1038	0.060	0.62	328.90	89	86		
16	1038	0.060	0.62	328.90	90	86	97.3	22.5
	1038	0.060	0.62	332.43	90	86		
17	1038	0.060	0.62	332.43	90	87	97.5	22.5
	1038	0.060	0.62	335.97	90	87		
18	1038	0.060	0.62	335.97	90	87	96.4	22.5
	1038	0.060	0.62	339.47	90	87		

Average	1040	0.066	0.669	65.87	88	85	97.2	23.4

Ave. test	1049	0.072	0.727	136.28	84	82	97.0	24.6

Velocity		Volumetric flow rates				Temperature		Moisture
ft/s	m/s	ACFM	SDCFM	m³/h	Rm³/h	°F	°C	% v/v
24.6	7.5	11622	4029	19747	6846	1049	565	4.0

Total part.	Gas sample volume		Verification of Isokinetic					
mg	SDCF	Rm³	Nb readings	Nb non Iso	Nb < 90%	Nb > 110%	Iso max.	Iso min.
0.00	135.11	3.826	36	0	0	0	100.3	93.9

Pstack "Hg	Pmeter "Hg	Md g/g-mole	Ms g/g-mole	Bwo ------	Ratio Vs max / Vs min ------	Vs max. ft/s	Vs min. ft/s
30.38	30.44	29.01	28.56	0.040	1.3	29.2	22.4

Particulate concentrations				Emission mass flow rate	
gr/ACF	gr/SDCF	mg/m³	mg/Rm³	lb/h	kg/h
0.000	0.000	0	0	0.0	0.0

"R" or "Reference Conditions" at 25°C, 101.3 kPa, dry basis.

A1-20

Exova Canada Inc.
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St-Bruno-de-Montarville
Québec Canada J3V 6E1

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : [illegible]	Contrôle: # [illegible] γ = [illegible] Ko = [illegible]	Conduit: Dia ("): [illegible] Porte ("): [illegible]
Endroit: [illegible]	Sonde: # [illegible] Cv = [illegible]	Diamètre: Av: [illegible] Ap: [illegible]
Date: [illegible] / Projet: R	Buse: # Dn = [illegible] Caisson #	Feuille : [illegible] de [illegible]
Site : [illegible]	Humidité supposée % = [illegible]	Fuite Avant: [illegible] "H2O @ [illegible] "Hg
Essai: [illegible]	Pression: Pbar ("Hg) = [illegible] Pstat ("H2O) = [illegible]	Fuite Après: "H2O @ "Hg

Point	Heure	TS (°F)	ΔP (" H2O)	ΔH (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
1	15:30	1057	0.11	1.02	28.00	91	90	[illegible]	250	250	-10	97				
		1057	0.11	1.06		91	90									
2	15:35	1054	0.11	1.02	32.43	91	90	[illegible]			-10	98				
		1054	0.11	1.02		91	90									
3	15:40	1058	0.10	0.98	36.98	92	90	[illegible]	250	250	-10	97				
		1058	0.10	0.98		93	90									
4	15:45	1056	0.10	0.90	41.21	93	91	[illegible]			-10	98				
		1056	0.10	0.90		93	91									
5	15:50	1055	0.10	0.90	[illegible]	94	91	[illegible]	250	250	-11	95				
		1055	0.10	0.90		94	91									
6	15:55	1055	0.10	0.90	[illegible]	95	91	[illegible]			-11	100				
		1058	0.10	0.90		95	91									
7	16:00	1052	0.08	0.81	[illegible]	92	92	[illegible]	[illegible]	250	-12	102				
		1052	0.08	0.81		93	92									
8	16:05	1052	0.08	0.81	58.25	95	92	[illegible]			-12	101				
		1052	0.08	0.81		99	92									
9	16:10	1052	0.08	0.81	[illegible]	92	93	[illegible]	[illegible]	250	-12	102				
		1052	0.08	0.81		92	93									
10	16:15	1053	0.08	0.81	66.30	94	93	[illegible]			-12	100				
		1053	0.08	0.81		[illegible]	93									
11	16:20	1050	0.08	0.81	70.30	95	94	[illegible]	250	250	-12	100				
		1050	0.08	0.81		95	94									
12	16:25	1054	0.08	0.81	74.30	96	94	[illegible]			-12	101				
	16:30	1054	0.08	0.81	78.40	96	94									

Constante => K = [illegible] A% = [illegible]

Échantillonneur: RF

Assistant à l'échantillonneur: [illegible]

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : [illegible]	Contrôle: #[illegible] γ = [illegible] Ko = [illegible]	Conduit: Dia ("): [illegible] Porte ("): [illegible]
Endroit: [illegible]	Sonde: # 26 Cv = 0.816	Diamètre: Av: [illegible] Ap: [illegible]
Date: 02-16-2012 / Projet: R	Buse: # Dn = [illegible] Caisson #	Feuille : 2 de 3
Site : [illegible]	Humidité supposée % = [illegible]	Fuite Avant: [illegible] "H2O @ [illegible] "Hg
Essai: [illegible]	Pression: Pbar ("Hg) = 30 Pstat ("H2O) = -0.18	Fuite Après: "H2O @ "Hg

Point	Heure	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
13	16:30	1000	0.58	0.9	[illegible]	88	95	50	250	250	-5	101				
		1000	0.58	0.9		88	95									
14	16:35	1000	0.08	[illegible]	[illegible]	89	96	52			-13	[illegible]				
		1000	0.08	[illegible]		89	96									
15	16:40	1000	0.08	[illegible]	[illegible]	90	97	54	250	250	[illegible]	101				
		1000	0.08	[illegible]		90	97									
16	16:45	1000	0.08	[illegible]	90.38	91	98	54			-14	101				
		1000	0.08	[illegible]		91	98									
17	16:50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	55	[illegible]	[illegible]	-15	[illegible]				
		[illegible]	[illegible]	[illegible]		[illegible]	94									
18	16:55	[illegible]	[illegible]	[illegible]	98.44	[illegible]	86	56			[illegible]	[illegible]				
	17:00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	86									
1	17:10	1066	0.67	0.72	[illegible]	94	86		256	256	-13	[illegible]				
		1066	0.67	0.72		94	86									
2	17:15	1062	0.67	0.72	[illegible]	94	83				-13	[illegible]				
		1062	0.67	0.72		94	83									
3	17:20	[illegible]	0.67	0.72	[illegible]	94	83	[illegible]	256	256	-13	106				
		[illegible]	0.67	0.72		94	83									
4	17:25	1062	0.67	0.72	114.01	94	84				-13	[illegible]				
		1062	0.67	0.72		94	84									
5	17:30	1064	0.66	[illegible]	117.78	95	84				-13	101				
		1064	0.66	[illegible]		95	84									
6	17:35	1066	0.66	[illegible]	121.30	95	85	54	250	250	-14	[illegible]				
	17:40	1066	0.66	[illegible]	124.80	95	85									

Constante => K = [illegible] A% = 3.90

Échantillonneur: [illegible]

Assistant à l'échantillonneur: [illegible]

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DONNÉES DE TERRAIN - ÉCHANTILLONNAGE MANUEL

Compagnie : Pomerleau Inc	Contrôle: # AGL γ = 0.9855 Ko = 1.0156	Conduit: Dia ("): 36" Porte (") 10"
Endroit: L'Ancienne-Lorette	Sonde: # 2E Cv = 0.846	Diamètre: Av: 8 Ap: 8
Date: 02/10/12 / Projet: R	Buse: # Dn = 0.539 Caisson #	Feuille : 3 de 3
Site : Immaculée	Humidité supposée % = 6	Fuite Avant: 0.000 "H2O @ 15 "Hg
Essai: # 1 5 VOC	Pression: Pbar ("Hg) = 30 Pstat ("H2O) =	Fuite Après: "H2O @ "Hg

Point	Heure	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (pi³)	Température Tmi (°F)	Tmo (°F)	Timp (°F)	Sonde (°F)	Four (°F)	Vacuum (" Hg)	% ISO (%)	Gaz O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
13	12:40	1056	0.06	0.61	104.89	25	85	58	250	250	-12	100				
		1056	0.06	0.66		25	85									
14	12:45	1056	0.09	0.92	108.40	25	86				-12	105				
		1056	0.09	0.92		25	86									
15	12:50	1056	0.09	0.92	113.90	25	86				-13	105				
		1056	0.09	0.92		25	86									
16	12:55	1063	0.09	0.92	119.95	25	87		250	250	-13	103				
		1063	0.09	0.92		25	87									
17	13:00	1054	0.09	0.92	141.36	25	88	58			-13	78				
		1054	0.09	0.92		25	88									
18	13:05	1054	0.09	0.92	116.21	26	88				-13	100				
		1054	0.09	0.92		26	88									
19	13:10	1060	0.06	0.61	150.45	26	90		250	250	-13	102				
		1060	0.06	0.61		26	90									
20	13:15	1060	0.06	0.61	154.00	26	90				-13	102				
		1060	0.06	0.61		26	90									
21	13:20	1060	0.06	0.61	159.60	26	90	58			-13	99				
		1066	0.06	0.61		26	90									
22	13:25	1060	0.06	0.61	161.21	26	90		250	250	-13	103				
		1060	0.06	0.61		26	90									
23	13:30	1060	0.06	0.61	164.69	26	90				-13	100				
		1060	0.06	0.61		26	90									
24	13:35	1060	0.06	0.61	168.21	26	90				-13	100				
	13:40	1060	0.06	0.61	171.78	26	90									

Constante => K = 139.78 A% = 3.90

Échantillonneur: BB

Assistant à l'échantillonneur: RQB

WEIGHT SHEET

Company	Agnico-Eagle
Location	Baker Lake
Date	02 / 10 / 2012
Site	
Train #	(SVOC-)
Test #	141 (PCDD/DF)

DATA			
Pbar:	30.10	po.Hg	
G	O_2	%	13.75
	CO_2	%	4.65
A	CO	ppm	9.5
Z	CO	%	

ITEM	Final weight	Initial weight	Water weight
Cooler	1582	1535	4.4
XAD-2 resin	2569	2506	5.3
Water trap	2087	2043	50.0
Impinger #1	586.5	543.5	43.0
Impinger #2	460.9	459.7	1.2
Impinger #3 (silica gel)	677.9	658.3	19.6
		Final weight	1923.1

Preparation	Prepared by	Recovered	Approved by
Date	2 octobre	2 octobre	
Laboratory			
On site	[illegible]	[illegible]	

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SAMPLING DATA SHEET - MANUAL SAMPLING

Company :	Agnico-Eagle	Control :	#	γ =	Ko =
City :	Limoilou	Probe :	#	Cv =	
Date :	/ Project:	Nozzle :	#	Dn =	Box : #
Site :	Incinérateur	Supposed moisture % =			
Test :		Pressure : Pbar ("Hg) =		Pstat ("H2O) =	

Duct:	Dia ("):		Port (")	
Diameter:	Bef:		After:	
Sheet :		of		
Leak before:		"H2O @		"Hg
Leak after:		"H2O @		"Hg

Point	Time	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (ft³)	Temperature Tmi (°F)	Tmo (°F)	Timp (°F)	Probe (°F)	Oven (°F)	Vacuum (" Hg)	% ISO (%)	Gases O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
1	15h15	1054	0,10	1,0	205.04	26	25		250	250	-9	98				
						26	25									
2	15h20	1050	0,10	1,0	209.39	26	26				-9	98				
						26	26									
3	15h25	1061	0,10	1,0	211.30	27	27				-9	97				
						27	27									
4	15h30	1061	0,080	0,80	215.29	27	28		250	250	-9	101				
						27	28									
5	15h35	1061	0,080	0,80	220.00	29	29				-9	101				
						29	29									
6	15h40	1057	0,080	0,80	223.95	28	30				-9	99				
						28	30									
7	15h45	1056	0,080	0,80	227.89	28	30				-9	100				
						28	30									
8	15h50	1056	0,080	0,80	231.82	28	30		250	250	-9	100				
						28	30									
9	15h55	1059	0,080	0,80	235.83	28	30				-9	99				
						28	30									
10	16h00	1059	0,080	0,80	239.75	29	31				-9	99				
						29	31									
11	16h05	1059	0,080	0,80	243.70	29	31		250	250	-9	99				
						29	31									
12	16h10	1059	0,080	0,80	247.55	30	31				-9	102				
	16h12				249.36	30	31									

Constant => K = A% =

Sampler: _____ Sampler assistant: _____

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SAMPLING DATA SHEET - MANUAL SAMPLING

Company : Agnico Eagle	Control : # AGL-8 Y = 0,9855 Ko = 1,0256	Duct: Dia (") 32"	Port (") 10"
City : Meadowlands	Probe : # 3E Cv = 0,8706	Diameter: Bef: 6	After: 2
Date 03/10/12 / Project: R	Nozzle : # Dn = 0,325 Box : #	Sheet : 3	of 3
Site : Intake gatehouse	Supposed moisture % = 6	Leak before: 0,000 "H2O @ RT	"Hg
Test : #3 Test	Pressure : Pbar ("Hg) = 30,3 Pstat ("H2O) = -0,18	Leak after:	"H2O @ "Hg

Point	Time	TS (°F)	ΔP (" H2O)	ΔH (" H2O)	Volume (ft³)	Temperature Tmi (°F)	Tmo (°F)	Timp (°F)	Probe (°F)	Oven (°F)	Vacuum (" Hg)	% ISO (%)	Gases O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
13	16h15	1053	0,07	0,30	251,34	84	81		250	250	-10	100				
						84	81									
14	16h20	1053	0,07	0,30	255,10	84	81				-10	99				
						84	81									
15	16h25	1053	0,07	0,31	258,86	84	81		250	250	-10	100				
						84	81									
16	16h30	1053	0,07	0,31	262,58	83	81				-10	100				
						83	81									
17	16h35	1060	0,06	0,60	266,34	83	83				-10	101				
						83	83									
18	16h40	1063	0,06	0,60	269,86	83	83		250	250	-10	103				
	16h45				273,47	83	83									
1	13h00	1040	0,06	0,61	223,65	84	83				-11	100				
						85	83									
2	13h05	1044	0,06	0,61	229,03	85	83		250	250	-11	101				
						85	83									
3	13h10	1050	0,06	0,61	230,60	85	83				-11	101				
						85	83									
4	13h15	1051	0,06	0,61	234,12	86	83				-11	100				
						86	83									
5	13h20	1049	0,06	0,61	237,61	86	84		250	250	-11	100				
						86	84									
6	13h25	1049	0,06	0,61	241,12	86	84				-11	100				
	13h30				244,61	86	84									

Constant => K = 22,14 A% = 98,39

Sampler: BB Sampler assistant: RQB

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Québec Canada J3V 6E1

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SAMPLING DATA SHEET - MANUAL SAMPLING

Company :	Control : # γ = Ko =	Duct: Dia ("): Port (")
City :	Probe : # Cv = 1.0	Diameter: Bef: After:
Date : / Project: R	Nozzle : # Dn = Box : #	Sheet : of
Site :	Supposed moisture % =	Leak before: "H2O @ "Hg
Test :	Pressure : Pbar ("Hg) = Pstat ("H2O) =	Leak after: "H2O @ "Hg

Point	Time	TS (°F)	▲P (" H2O)	▲H (" H2O)	Volume (ft³)	Temperature Tmi (°F)	Tmo (°F)	Timp (°F)	Probe (°F)	Oven (°F)	Vacuum (" Hg)	% ISO (%)	Gases O2 (%)	CO2 (%)	CO (ppmv / %)	NOx ppmv
		43					84									
							84									
		41					84									
							84									
		42					85									
							85									
		42					85									
							85									
		34					85									
							85									
		34					85									
							85									
		35					86									
							86									
		36					86									
							86									
		38					86									
							86									
		38					86									
							86									
		38					87									
							87									
		38					87									
							87									

Constant => K = A% =

Sampler: _____ Sampler assistant: _____

WEIGHT SHEET

Company	Agnico-Eagle
Location	Baker Lake
Date	02 / 10 / 2012
Site	[illegible]
Train #	(SVOC-)
Test #	3 (PCDD/DF)

DATA			
Pbar: 30.39 po.Hg			
G	O_2	%	13.60
	CO_2	%	2.91
A	CO	ppm	22.1
Z	CO	%	

ITEM	Final weight	Initial weight	Water weight
Cooler	165.8	165.2	0.6
XAD-2 resin	342.8	334.9	7.9
Water trap	372.6	283.2	89.4
Impinger #1	627.8	609.9	17.9
Impinger #2	400.9	400.2	0.7
Impinger #3 (silica gel)	634.5	630.4	4.1
		Final weight	118.6

Preparation	Prepared by	Recovered	Approved by
Date			
Laboratory			
On site			

CALIBRATION OF SAMPLING MODULE

Module Identification:	AGL_2
Inventory number:	0
Atmospheric pressure ("Hg) :	30.25

Responsable calibration :	B.Bouchard
Responsable data entry:	0
Calibration date:	07-févr-12
Next calibration date:	07-févr-13

del.H in.H2O	Vw ft³	Vd ft³	Tw deg.F	Tdo deg.F	Td deg.F	time min.	del.m in.H2O	factor count.
1.0	5.00	5.23	72.0	84.0	86.5	5.62	-0.40	1.0008
1.0	5.00	5.24	72.0	85.5	87.3	5.63	-0.40	1.0008
2.0	6.00	6.19	72.0	88.0	89.5	4.82	-0.55	1.0008
2.0	5.00	5.16	72.0	87.0	90.3	4.02	-0.55	1.0008
3.0	10.00	10.46	71.0	86.5	91.0	6.62	-0.80	1.0008
3.0	10.00	10.50	71.0	87.0	92.0	6.62	-0.80	1.0008
4.0	13.00	13.63	69.0	88.0	93.3	7.65	-0.90	1.0008
4.0	11.00	11.62	69.0	89.5	94.8	6.50	-0.90	1.0008
5.0	10.00	10.50	69.0	89.5	94.8	5.30	-1.10	1.0008
5.0	10.00	10.52	69.0	90.5	95.8	5.30	-1.10	1.0008

del.H in.H2O	Vwc ft³	K	del.H@ in.H2O	Qm cfm	Ko	gamma	Acceptability criteria 1.50%	yes/no
1.0	5.00	0.7872	0.68	0.9074	1.1527	0.9795	0.60	yes
1.0	5.00	0.7883	0.69	0.9083	1.1522	0.9790	0.66	yes
2.0	6.00	1.1160	0.70	1.2754	1.1428	0.9958	1.05	yes
2.0	5.00	1.1150	0.70	1.2720	1.1408	0.9968	1.15	yes
3.0	10.01	1.3633	0.70	1.5416	1.1308	0.9837	0.18	yes
3.0	10.01	1.3639	0.70	1.5431	1.1313	0.9818	0.38	yes
4.0	13.01	1.5745	0.73	1.7410	1.1058	0.9865	0.11	yes
4.0	11.01	1.5766	0.74	1.7385	1.1027	0.9818	0.37	yes
5.0	10.01	1.7606	0.74	1.9327	1.0978	0.9849	0.06	yes
5.0	10.01	1.7622	0.74	1.9363	1.0988	0.9848	0.07	yes
	AVERAGE		0.71	1.4796	1.1256	0.9855		

Reference: Method 1/RM/8

Probe Identification:	2E (EAU)	Calibration date	22-févr-12
Inventory number	0	Calibration technician responsable	S.Demers
		Data prossessing technician responsable	S.Demers
Barometric pressure:	29.76 "Hg		
Ambiant temperature:	70.0 oF	Ms : 28.73	

NOZZLES	SCALE	PITOT REFERENCE del p	PITOT "S" TYPE del p	Vs ft/s	Cv
	1	1.000	1.510	67.308	0.814
	2	0.660	0.993	54.682	0.815
WITHOUT	3	0.518	0.776	48.443	0.817
NOZZLE	4	0.285	0.425	35.933	0.819
	5	0.140	0.205	25.184	0.826
	6	0.050	0.072	15.051	0.833
	1	1.000	1.510	67.308	0.814
	2	0.660	0.993	54.682	0.815
Dia. 1/8	3	0.518	0.776	48.443	0.817
No. EX5	4	0.285	0.425	35.933	0.819
	5	0.140	0.205	25.184	0.826
	6	0.050	0.072	15.051	0.833
	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
Dia. 3/16	3	0.518	0.802	48.443	0.804
No. EX5	4	0.285	0.438	35.933	0.807
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
Dia. 1/4	3	0.518	0.803	48.443	0.803
No. EX5	4	0.285	0.439	35.933	0.806
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
Dia. 5/16	3	0.518	0.804	48.443	0.803
No. EX5	4	0.285	0.440	35.933	0.805
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
	1	1.000	1.580	67.308	0.796
	2	0.660	1.035	54.682	0.799
Dia. 3/8	3	0.518	0.804	48.443	0.803
No. EX5	4	0.285	0.440	35.933	0.805
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
	1	1.000	1.590	67.308	0.793
	2	0.660	1.040	54.682	0.797
Dia. 7/16	3	0.518	0.806	48.443	0.802
No. EX5	4	0.285	0.441	35.933	0.804
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816
	1	1.000	1.590	67.308	0.793
	2	0.660	1.040	54.682	0.797
Dia. 1/2	3	0.518	0.807	48.443	0.801
No. EX5	4	0.285	0.441	35.933	0.804
	5	0.140	0.214	25.184	0.809
	6	0.050	0.075	15.051	0.816

NOTICE: Shows the average ot three reading taken during calibration.

Rapport des codes d'échantillons

Code échantillon	Projet	Date	Site de prélèvement	Test (description)	Paramètres
12089-3861	R12-089	17-oct-12	Incinérateur	Test #1 Filtre	Part., Métaux, Hg
12089-3862	R12-089	17-oct-12	Incinérateur	Test #1 Lav-sonde (ace)	Part., Métaux, Hg
12089-3863	R12-089	17-oct-12	Incinérateur	Test #1 Lav-sonde (HNO3)	Métaux, Hg
12089-3864	R12-089	17-oct-12	Incinérateur	Test #1 Aliquot	HCl
12089-3865	R12-089	17-oct-12	Incinérateur	Test #1 Imp 1-2	Métaux, Hg
12089-3866	R12-089	17-oct-12	Incinérateur	Test #1 Imp 3-4	Métaux, Hg
12089-3867	R12-089	17-oct-12	Incinérateur	Test #1 Imp 5	Hg
12089-3868	R12-089	17-oct-12	Incinérateur	Test #1 Imp 6-7	Hg
12089-3869	R12-089	17-oct-12	Incinérateur	Test #2 Filtre	Part., Métaux, Hg
12089-3870	R12-089	17-oct-12	Incinérateur	Test #2 Lav-sonde (ace)	Part., Métaux, Hg
12089-3871	R12-089	17-oct-12	Incinérateur	Test #2 Lav-sonde (HNO3)	Métaux, Hg
12089-3872	R12-089	17-oct-12	Incinérateur	Test #2 Aliquot	HCl
12089-3873	R12-089	17-oct-12	Incinérateur	Test #2 Imp 1-2	Métaux, Hg
12089-3874	R12-089	17-oct-12	Incinérateur	Test #2 Imp 3-4	Métaux, Hg
12089-3875	R12-089	17-oct-12	Incinérateur	Test #2 Imp 5	Hg
12089-3876	R12-089	17-oct-12	Incinérateur	Test #2 Imp 6-7	Hg

Code échantillon	Projet	Date	Site de prélèvement	Test (description)	Paramètres
12089-3877	R12-089	17-oct-12	Incinérateur	Test #3 Filtre	Part., Métaux, Hg
12089-3878	R12-089	17-oct-12	Incinérateur	Test #3 Lav-sonde (ace)	Part., Métaux, Hg
12089-3879	R12-089	17-oct-12	Incinérateur	Test #3 Lav-sonde (HNO3)	Métaux, Hg
12089-3880	R12-089	17-oct-12	Incinérateur	Test #3 Aliquot	HCl
12089-3881	R12-089	17-oct-12	Incinérateur	Test #3 Imp 1-2	Métaux, Hg
12089-3882	R12-089	17-oct-12	Incinérateur	Test #3 Imp 3-4	Métaux, Hg
12089-3883	R12-089	17-oct-12	Incinérateur	Test #3 Imp 5	Hg
12089-3884	R12-089	17-oct-12	Incinérateur	Test #3 Imp 6-7	Hg
12089-3885	R12-089	17-oct-12	Incinérateur	Blanc filtre	Métaux, Hg
12089-3886	R12-089	17-oct-12	Incinérateur	Blanc HNO3	Métaux, Hg
12089-3887	R12-089	17-oct-12	Incinérateur	Blanc d'eau	HCl
12089-3888	R12-089	17-oct-12	Incinérateur	Blanc de HNO3/H2O2	Métaux, Hg
12089-3889	R12-089	17-oct-12	Incinérateur	Blanc H2SO4/KMnO4	Hg
12089-3890	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.1 (FH)	PCDD/F
12089-3891	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.2 (F)	PCDD/F
12089-3892	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.3 (X)	PCDD/F
12089-3893	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.4 (FCR)	PCDD/F
12089-3894	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.5 (C1)	PCDD/F
12089-3895	R12-089	17-oct-12	Incinérateur	Test #1 SVOC 12089.7 (GR)	PCDD/F
12089-3896	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.10 (FH)	PCDD/F

Code échantillon	Projet	Date	Site de prélèvement	Test (description)	Paramètres
12089-3897	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.11 (F)	PCDD/F
12089-3898	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.12 (X)	PCDD/F
12089-3899	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.13 (FCR)	PCDD/F
12089-3900	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.14 (C1)	PCDD/F
12089-3901	R12-089	17-oct-12	Incinérateur	Test #2 SVOC 12089.16 (GR)	PCDD/F
12089-3902	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.20 (FH)	PCDD/F
12089-3903	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.21 (F)	PCDD/F
12089-3904	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.22 (X)	PCDD/F
12089-3905	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.23 (FCR)	PCDD/F
12089-3906	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.24 (C1)	PCDD/F
12089-3907	R12-089	17-oct-12	Incinérateur	Test #3 SVOC 12089.26 (GR)	PCDD/F
12089-3908	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.30 (FH)	PCDD/F
12089-3909	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.31 (F)	PCDD/F
12089-3910	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.32 (X)	PCDD/F
12089-3911	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.33 (FCR)	PCDD/F
12089-3912	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.34 (C1)	PCDD/F
12089-3913	R12-089	17-oct-12	Incinérateur	Blanc SVOC 12089.35 (GR)	PCDD/F

AGAT Laboratoires

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FAX (514)333-3046
http://www.agatlabs.com

NOM DU CLIENT: EXOVA
1390 RUE HOCQUART
ST-BRUNO DE DE MONTARVILLE, QC J3V6E1
(450) 441-5880

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

N° DE PROJET: R12-089

N° BON DE TRAVAIL: 12M639416

HAUTE RÉSOLUTION VÉRIFIÉ PAR: Marc-André Desjardins, chimiste

DATE DU RAPPORT: 2012-09-19

VERSION*: 1

NOMBRE DE PAGES: 7

Si vous desirez de l'information concernant cette analyse, S.V.P. contacter votre chargé de projets au (514) 337-1000

*NOTES

A1-34

Nous disposerons des échantillons dans les 30 jours suivants les analyses. S.V.P. Contactez le laboratoire si vous désirez avoir un délai d'entreposage

AGAT Laboratoires

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Certificat d'analyse

N° BON DE TRAVAIL: 12M639416

N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

PRÉLEVÉ PAR:

LIEU DE PRÉLÈVEMENT:

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-09-07

DATE DU RAPPORT: 2012-09-19

	DESCRIPTION D'ÉCHANTILLON:			PROOF RD-089
	MATRICE:			Liquide
	DATE D'ÉCHANTILLONNAGE:			2012-09-07
Paramètre	Unités	C / N	LDR	3685411
2,3,7,8-TCDD (pg total)	pg		0.5	3.7
1,2,3,7,8 PeCDD (pg total)	pg		1	7
1,2,3,4,7,8 HxCDD (pg total)	pg		0.6	4.6
1,2,3,6,7,8 HxCDD (pg total)	pg		0.5	5.8
1,2,3,7,8,9 HxCDD (pg total)	pg		0.6	13.7
1,2,3,4,6,7,8 HpCDD (pg total)	pg		0.7	27.2
OCDD (pg total)	pg		1	47
2,3,7,8 TCDF (pg total)	pg		0.3	5.3
1,2,3,7,8 PeCDF (pg total)	pg		0.4	8.3
2,3,4,7,8-PeCDF (pg total)	pg		0.4	17.1
1,2,3,4,7,8 HxCDF (pg total)	pg		0.7	34.7
1,2,3,6,7,8 HxCDF (pg total)	pg		0.7	11.8
2,3,4,6,7,8-HxCDF (pg total)	pg		0.8	15.2
1,2,3,7,8,9 HxCDF (pg total)	pg		1	6
1,2,3,4,6,7,8 HpCDF (pg total)	pg		0.9	28.3
1,2,3,4,7,8,9 HpCDF (pg total)	pg		2	<2
OCDF (pg total)	pg		1	8
Sommation des Tétrachlorodibenzodioxines	pg		0.5	108
Sommation des Pentachlorodibenzodioxines	pg		1	131
Sommation des Hexachlorodibenzodioxines	pg		0.6	83.7
Sommation des Heptachlorodibenzodioxines	pg		0.7	50.3
Sommation des PCDDs	pg		1	420
Sommation des Tétrachlorodibenzofuranes	pg		0.3	367
Sommation des Pentachlorodibenzofuranes	pg		0.4	228

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Certificat d'analyse

N° BON DE TRAVAIL: 12M639416

N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

PRÉLEVÉ PAR:

LIEU DE PRÉLÈVEMENT:

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-09-07

DATE DU RAPPORT: 2012-09-19

				DESCRIPTION D'ÉCHANTILLON:	PROOF RD-089
				MATRICE:	Liquide
				DATE D'ÉCHANTILLONNAGE:	2012-09-07
Paramètre	Unités	C / N	LDR		3685411
Sommation des Hexachlorodibenzofuranes	pg		1		117
Sommation des Heptachlorodibenzofuranes	pg		2		45
Sommation des PCDFs	pg		2		764
2,3,7,8-Tetra CDD (TEF 1.0)	TEQ				3.74
1,2,3,7,8-Penta CDD (TEF 0.5)	TEQ				3.44
1,2,3,4,7,8-Hexa CDD (TEF 0.1)	TEQ				0.458
1,2,3,6,7,8-Hexa CDD (TEF 0.1)	TEQ				0.584
1,2,3,7,8,9-Hexa CDD (TEF 0.1)	TEQ				1.37
1,2,3,4,6,7,8-Hepta CDD (TEF 0.01)	TEQ				0.272
Octa CDD (TEF 0.001)	TEQ				0.0467
2,3,7,8-Tetra CDF (TEF 0.1)	TEQ				0.530
1,2,3,7,8-Penta CDF (TEF 0.05)	TEQ				0.417
2,3,4,7,8-Penta CDF (TEF 0.5)	TEQ				8.53
1,2,3,4,7,8-Hexa CDF (TEF 0.1)	TEQ				3.47
1,2,3,6,7,8-Hexa CDF (TEF 0.1)	TEQ				1.18
2,3,4,6,7,8-Hexa CDF (TEF 0.1)	TEQ				1.52
1,2,3,7,8,9-Hexa CDF (TEF 0.1)	TEQ				0.578
1,2,3,4,6,7,8-Hepta CDF (TEF 0.01)	TEQ				0.283
1,2,3,4,7,8,9-Hepta CDF (TEF 0.01)	TEQ				0
Octa CDF (TEF 0.001)	TEQ				0.00800
Sommation des PCDDs et PCDFs (TEF)					26.4
13C-2378-TCDF	%				107
13C-12378-PeCDF	%				120
13C-23478-PeCDF	%				122
13C-123478-HxCDF	%				99
13C-123678-HxCDF	%				93

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Certificat d'analyse

N° BON DE TRAVAIL: 12M639416

N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

PRÉLEVÉ PAR:

LIEU DE PRÉLÈVEMENT:

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-09-07

DATE DU RAPPORT: 2012-09-19

				DESCRIPTION D'ÉCHANTILLON:	PROOF RD-089
				MATRICE:	Liquide
				DATE D'ÉCHANTILLONNAGE:	2012-09-07
Paramètre	Unités	C / N	LDR		3685411
13C-234678-HxCDF	%				89
13C-123789-HxCDF	%				94
13C-1234678-HpCDF	%				98
13C-1234789-HpCDF	%				98
13C-2378-TCDD	%				98
13C-12378-PeCDD	%				114
13C-123478-HxCDD	%				91
13C-123678-HxCDD	%				101
13C-1234678-HxCDD	%				113
13C-OCDD	%				118

Commentaires: LDR - Limite de détection rapportée; C / N - Critères Normes

3685411 Le résultat en pg total correspond au composite de chacune des parties du train d'échantillonnage.

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Contrôle de qualité

NOM DU CLIENT: EXOVA
N° DE PROJET: R12-089
PRÉLEVÉ PAR:

N° BON DE TRAVAIL: 12M639416
À L'ATTENTION DE: CHRISTIAN ST-PIERRE
LIEU DE PRÉLÈVEMENT:

Analyse haute résolution

Date du rapport: 2012-09-19			DUPLICATA			MATÉRIAU DE RÉFÉRENCE				BLANC FORTIFIÉ			ÉCH. FORTIFIÉ		
PARAMÈTRE	Lot	N° éch.	Dup #1	Dup #2	% d'écart	Blanc de méthode	% Récup.	Limites Inf.	Limites Sup.	% Récup.	Limites Inf.	Limites Sup.	% Récup.	Limites Inf.	Limites Sup.
Dioxines et furanes - Air (train d'échantillonnage)															
2,3,7,8-TCDD (pg total)	1	NA	NA	NA	0.0	<0.4	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8 PeCDD (pg total)	1	NA	NA	NA	0.0	<0.4	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8 HxCDD (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,6,7,8 HxCDD (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8,9 HxCDD (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,6,7,8 HpCDD (pg total)	1	NA	NA	NA	0.0	<0.5	NA	70%	130%	NA	70%	130%	NA	70%	130%
OCDD (pg total)	1	NA	NA	NA	0.0	<0.7	NA	70%	130%	NA	70%	130%	NA	70%	130%
2,3,7,8 TCDF (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8 PeCDF (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
2,3,4,7,8-PeCDF (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8 HxCDF (pg total)	1	NA	NA	NA	0.0	<0.2	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,6,7,8 HxCDF (pg total)	1	NA	NA	NA	0.0	<0.2	NA	70%	130%	NA	70%	130%	NA	70%	130%
2,3,4,6,7,8-HxCDF (pg total)	1	NA	NA	NA	0.0	<0.2	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8,9 HxCDF (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,6,7,8 HpCDF (pg total)	1	NA	NA	NA	0.0	<0.2	NA	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8,9 HpCDF (pg total)	1	NA	NA	NA	0.0	<0.3	NA	70%	130%	NA	70%	130%	NA	70%	130%
OCDF (pg total)	1	NA	NA	NA	0.0	<0.8	NA	70%	130%	NA	70%	130%	NA	70%	130%

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Sommaire de méthode

NOM DU CLIENT: EXOVA

N° BON DE TRAVAIL: 12M639416

N° DE PROJET: R12-089

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

PRÉLEVÉ PAR:

LIEU DE PRÉLÈVEMENT:

PARAMÈTRE	PRÉPARÉ LE	ANALYSÉ LE	AGAT P.O.N.	RÉFÉRENCE DE LITTÉRATURE	TECHNIQUE ANALYTIQUE
Analyse haute résolution					
2,3,7,8-TCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8 PeCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8 HxCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8 HxCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9 HxCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8 HpCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
OCDD (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8 TCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8 PeCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,7,8-PeCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8 HxCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8 HxCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,6,7,8-HxCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9 HxCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8 HpCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8,9 HpCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
OCDF (pg total)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Tétrachlorodibenzodioxines	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Pentachlorodibenzodioxines	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Hexachlorodibenzodioxines	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Heptachlorodibenzodioxines	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDDs	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Tétrachlorodibenzofuranes	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Pentachlorodibenzofuranes	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Hexachlorodibenzofuranes	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Heptachlorodibenzofuranes	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDFs	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8-Tetra CDD (TEF 1.0)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8-Penta CDD (TEF 0.5)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8-Hexa CDD (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8-Hexa CDD (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9-Hexa CDD (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8-Hepta CDD (TEF 0.01)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Octa CDD (TEF 0.001)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8-Tetra CDF (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8-Penta CDF (TEF 0.05)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,7,8-Penta CDF (TEF 0.5)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8-Hexa CDF (TEF 0.1)	2012-09-18	2012-09-18	HR_151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8-Hexa CDF (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,6,7,8-Hexa CDF (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9-Hexa CDF (TEF 0.1)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8-Hepta CDF (TEF 0.01)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8,9-Hepta CDF (TEF 0.01)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS

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Sommaire de méthode

NOM DU CLIENT: EXOVA

N° BON DE TRAVAIL: 12M639416

N° DE PROJET: R12-089

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

PRÉLEVÉ PAR:

LIEU DE PRÉLÈVEMENT:

PARAMÈTRE	PRÉPARÉ LE	ANALYSÉ LE	AGAT P.O.N.	RÉFÉRENCE DE LITTÉRATURE	TECHNIQUE ANALYTIQUE
Octa CDF (TEF 0.001)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDDs et PCDFs (TEF)	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-2378-TCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-12378-PeCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-23478-PeCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123478-HxCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123678-HxCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-234678-HxCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123789-HxCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234678-HpCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234789-HpCDF	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-2378-TCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-12378-PeCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123478-HxCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123678-HxCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234678-HxCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-OCDD	2012-09-18	2012-09-18	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS

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Test Certificate

Agnico-Eagle Mines Ltd, Meadowbank Division

Baker Lake, Nunavut

Stack sampling

Project R12-089

Samples	Laboratory Number	Particle Matters (g)
Detection limit		0.00004
Incinerator		
Test #1 Filter	12089-3861	0.04937
Front wash	12089-3862	0.00315
Total		0.05252
Test #3 Filter	12089-3877	0.05931
Front wash	12089-3878	0.00468
Total		0.06399
Filter blank	12089-3885	< 0.00004
Front wash blank (has not been subtracted from results)		0.00119

Reception date : October 17th, 2012

Date of analysis : October 18th and 19th, 2012

Report date: October 24th, 2012

Reference method : A-01

File number: R12089-01 version 2

CHIMISTE
Christian St-Pierre
EXO3-107
QUÉBEC

Christian St-Pierre, B. Sc. Chemist

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Request number: **12-508329**

Date Received: 2012-10-19

Date Certificate Issued: 2012-11-28

Certificate Version: 2

☑ Official Certificate of Analysis

☐ Preliminary Certificate of Analysis

Client

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Telephone : (450) 441-5880
Fax : (450) 441-4316

P.O. Number	Your project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Comments

Version 02: Division of the certificate of analysis at the client's request.

This version replaces and cancels all earlier version.

NA : Information Not Available

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)			
	Lab. No.	**2233446**	**2233448**	**2233449**	**2233454**
	Your Reference	12089-3864 (174ml)	12089-3865 (177ml)	12089-3866 (309ml)	12089-3867 (43ml)+3868 (296ml)
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19
Parameter(s)					
Method					
Reference					
Mercury (subcontract)	Preparation	-	-	-	-
Analysis done by sub-contracting	Analysis	-	-	-	-
	Sequential No.	-	-	-	NA
Mercury		-	-	-	Annexe
Volume	Preparation	-	-	-	-
Not applicable	Analysis	-	-	-	-
Not applicable	Sequential No.	NA	NA	NA	NA
Volume	mL	174	177	309	339

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)			
	Lab. No.	**2233462**	**2233463**	**2233465**	**2233466**
	Your Reference	12089-3880 (251ml)	12089-3881 (259ml)	12089-3882 (320ml)	12089-3883 (80ml)+3884 (460ml)
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19
Parameter(s)					
Method					
Reference					
Mercury (subcontract)	Preparation	-	-	-	-
Analysis done by sub-contracting	Analysis	-	-	-	-
	Sequential No.	-	-	-	NA
Mercury		-	-	-	406
Volume	Preparation	-	-	-	-
Not applicable	Analysis	-	-	-	-
Not applicable	Sequential No.	NA	NA	NA	NA
Volume	mL	251	259	320	540

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)		
	Lab. No.	**2233468**	**2233469**	**2233471**
	Your Reference	12089-3887 (100ml)	12089-3888 (100ml)	12089-3889 (100ml)
	Matrix	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank
	Date sampled	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19
Parameter(s)				
Method Reference				
Mercury (subcontract)	Preparation	-	-	-
Analysis done by sub-contracting	Analysis	-	-	-
	Sequential No.	-	-	NA
Mercury		-	-	Annexe
Volume	Preparation	-	-	-
Not applicable	Analysis	-	-	-
Not applicable	Sequential No.	NA	NA	NA
Volume	mL	100	100	100

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Pointe-Claire laboratory.

David Cajolet, chemist

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	2233446	2233462	2233468
Your Reference	12089-3864 (174ml) #1	12089-3880 (251ml) #2	12089-3887 (100ml) Blank
Matrix	Air	Air	Air
Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
Site sampled	Meadowbank Imp 1	Meadowbank Imp 1	Meadowbank Imp 1
Incinerator Date sampled	NA	NA	NA
Date received	2012-10-19	2012-10-19	2012-10-19

Parameter(s)

Method Reference				
Chlorides (IC)	Preparation	2012-10-24	2012-10-24	2012-10-23
Anions by ion chromatography. E-A-EN-EN-CHI-PC-MD028 (REF: MA.300-IONS 1.1, CEAEQ)	Analysis	2012-10-24	2012-10-24	2012-10-23
	Sequential No.	405298	405298	405298
Chloride	µg	285000	63700	880

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Pointe-Claire laboratory.

David Cajolet, chemist

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Lab. No.	2233448	2233449	2233463	2233465
	Your Reference	12089-3865 (177ml)	12089-3866 (309ml)	12089-3881 (259ml)	12089-3882 (320ml)
		#1		#3	
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
		Imp 1-2	Imp 3-4	Imp 1-2	Imp 3-4
Incinerator	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19

Parameter(s) / Method Reference					
Aluminum (Al)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Aluminum	µg	26	< 31	< 26	< 32
Antimony (Sb)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Antimony	µg	< 2	< 3	< 3	< 3
Arsenic (As)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Arsenic	µg	< 2	< 3	< 3	< 3
Barium (Ba)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Barium	µg	< 18	< 31	< 26	< 32
Beryllium (Be)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Beryllium	µg	< 2	< 3	< 3	< 3
Bismuth (Bi)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Bismuth	µg	< 2	< 3	< 3	< 3
Boron (B)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Boron	µg	< 35	< 62	< 52	< 64

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)			
	Lab. No.	**2233448**	**2233449**	**2233463**	**2233465**
	Your Reference	12089-3865 (177ml)	12089-3866 (309ml)	12089-3881 (259ml)	12089-3882 (320ml)
		#1		#3	
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
Incinerator		Imp 1-2	Imp 3-4	Imp 1-2	Imp 3-4
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19
Parameter(s)					
Method					
Reference					
Cadmium (Cd)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Cadmium	µg	< 0.9	< 1.5	< 1.3	< 1.6
Calcium (Ca)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Calcium	µg	77	83	< 52	< 64
Chromium (Cr)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Chromium	µg	2	< 3	< 3	< 3
Cobalt (Co)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Cobalt	µg	< 2	< 3	< 3	< 3
Copper (Cu)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Copper	µg	< 2	< 3	< 3	< 3
Iron (Fe)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Iron	µg	< 89	< 155	< 130	< 160
Lead (Pb)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-24	2012-10-24	2012-10-24	2012-10-24
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Lead	µg	2	4	< 3	< 3

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Lab. No.	2233448	2233449	2233463	2233465
	Your Reference	12089-3865 (177ml)	12089-3866 (309ml)	12089-3881 (259ml)	12089-3882 (320ml)
		#1		#3	
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
Incinerator	Site sampled	Meadowbank Imp 1-2	Meadowbank Imp 3-4	Meadowbank Imp 1-2	Meadowbank Imp 3-4
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19

Parameter(s) / Method / Reference					
Lithium (Li)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Lithium	µg	< 2	< 3	< 3	< 3
Magnesium (Mg)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Magnesium	µg	15	15	4	< 3
Manganese (Mn)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Manganese	µg	133	129	3	< 3
Mercury (Hg)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Mercury	µg	< 0.2	< 0.3	< 0.3	< 0.3
Molybdenum (Mo)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Molybdenum	µg	< 2	< 3	< 3	< 3
Nickel (Ni)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Nickel	µg	30	3	< 3	< 3
Phosphorus (P)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Phosphorus	µg	< 177	< 309	< 259	< 320

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Sample(s)			
Lab. No.	**2233448**	**2233449**	**2233463**	**2233465**
Your Reference	12089-3865 (177ml) #1	12089-3866 (309ml)	12089-3881 (259ml) #3	12089-3882 (320ml)
Matrix	Air	Air	Air	Air
Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
Site sampled	Meadowbank Imp 1-2	Meadowbank Imp 3-4	Meadowbank Imp 1-2	Meadowbank Imp 3-4
Incinerator Date sampled	NA	NA	NA	NA
Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19

Parameter(s) / Method / Reference					
Potassium (K)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Potassium	µg	< 885	< 1550	< 1300	< 1600
Selenium (Se)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Selenium	µg	< 2	< 3	< 3	< 3
Silicon extractable (Si)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Silicium	µg	< 89	< 155	< 130	< 160
Silver (Ag)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Silver	µg	< 0.9	< 1.5	< 1.3	< 1.6
Sodium (Na)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Sodium	µg	< 885	< 1550	< 1300	< 1600
Strontium (Sr)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Strontium	µg	< 2	< 3	< 3	< 3
Tellurium (Te)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Tellurium	µg	< 2	< 3	< 3	< 3

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)			
	Lab. No.	**2233448**	**2233449**	**2233463**	**2233465**
	Your Reference	12089-3865 (177ml)	12089-3866 (309ml)	12089-3881 (259ml)	12089-3882 (320ml)
		#1		#3	
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
		Imp 1-2	Imp 3-4	Imp 1-2	Imp 3-4
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19
Parameter(s)					
Method					
Reference					
Thallium (Tl)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Thallium	µg	< 2	< 3	< 3	< 3
Tin (Sn)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Tin	µg	< 2	20	< 3	22
Titanium (Ti)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Titanium	µg	< 2	< 3	< 3	< 3
Uranium (U)	Preparation	2012-10-22	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Uranium	µg	< 2	< 3	< 3	< 3
Vanadium (V)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Vanadium	µg	< 2	< 3	< 3	< 3
Zinc (Zn)	Preparation	2012-10-23	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250	405250	405250	405250
Zinc	µg	< 12	< 22	< 18	< 22

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	**2233469**
Your Reference	12089-3888 (100ml) Blank
Matrix	Air
Sampled by	Exova St-Bruno
Site sampled	Meadowbank Imp Incinerator
Date sampled	NA
Date received	2012-10-19

Parameter(s) / Method / Reference		
Aluminum (Al)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Aluminum	µg	< 10
Antimony (Sb)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Antimony	µg	< 1
Arsenic (As)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Arsenic	µg	< 1
Barium (Ba)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Barium	µg	< 10
Beryllium (Be)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Beryllium	µg	< 1
Bismuth (Bi)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Bismuth	µg	< 1
Boron (B)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Boron	µg	< 20

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

	Lab. No.	**2233469**
	Your Reference	12089-3888 (100ml) Blank
	Matrix	Air
	Sampled by	Exova St-Bruno
	Site sampled	Meadowbank Emp
Incinerator	Date sampled	NA
	Date received	2012-10-19

Parameter(s) / Method / Reference		
Cadmium (Cd)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Cadmium	µg	< 0.5
Calcium (Ca)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Calcium	µg	< 20
Chromium (Cr)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Chromium	µg	< 1
Cobalt (Co)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Cobalt	µg	< 1
Copper (Cu)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Copper	µg	< 1
Iron (Fe)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Iron	µg	< 50
Lead (Pb)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-24
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Lead	µg	< 1

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	**2233469**
Your Reference	12089-3888 (100ml) Blank
Matrix	Air
Sampled by	Exova St-Bruno
Site sampled	Meadowbank Imp Incinerator
Date sampled	NA
Date received	2012-10-19

Parameter(s) / Method / Reference		
Lithium (Li)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Lithium	µg	< 1
Magnesium (Mg)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Magnesium	µg	< 1
Manganese (Mn)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Manganese	µg	< 1
Mercury (Hg)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Mercury	µg	< 0.1
Molybdenum (Mo)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Molybdenum	µg	< 1
Nickel (Ni)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Nickel	µg	< 1
Phosphorus (P)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Phosphorus	µg	< 100

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	**2233469**
Your Reference	12089-3888 (100ml) Blank
Matrix	Air
Sampled by	Exova St-Bruno
Site sampled	Meadowbank Imp Incinerator
Date sampled	NA
Date received	2012-10-19

Parameter(s) / Method / Reference		
Potassium (K)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Potassium	µg	< 500
Selenium (Se)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Selenium	µg	< 1
Silicon extractable (Si)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Silicium	µg	< 50
Silver (Ag)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Silver	µg	< 0.5
Sodium (Na)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Sodium	µg	< 500
Strontium (Sr)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Strontium	µg	< 1
Tellurium (Te)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Tellurium	µg	< 1

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	**2233469**
Your Reference	12089-3888 (100ml) Blank
Matrix	Air
Sampled by	Exova St-Bruno
Site sampled	Meadowbank Imp Incinerator
Date sampled	NA
Date received	2012-10-19

Parameter(s) / Method Reference		
Thallium (Tl)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Thallium	µg	< 1
Tin (Sn)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Tin	µg	9
Titanium (Ti)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Titanium	µg	< 1
Uranium (U)	Preparation	2012-10-22
Metals by ICP	Analysis	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Uranium	µg	< 1
Vanadium (V)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Vanadium	µg	< 1
Zinc (Zn)	Preparation	2012-10-23
Metals by ICP	Analysis	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405250
Zinc	µg	< 7

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Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Lab. No.	Sample(s) 2233441	2233461	2233467
	Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
		#1	#3	Blank
	Matrix	Filtre	Filtre	Filtre
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank
		F+S	F+S	F+S
Incinerator	Date sampled	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19
Parameter(s)				
Method Reference				
Aluminum (Al)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Aluminum	µg	< 12	152	< 12
Antimony (Sb)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-25
	Sequential No.	405260	405260	405260
Antimony	µg	1.6	18.6	< 0.5
Arsenic (As)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Arsenic	µg	0.9	1.6	< 0.5
Barium (Ba)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Barium	µg	< 0.5	5.9	< 0.5
Beryllium (Be)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Beryllium	µg	< 0.2	< 0.2	< 0.2
Bismuth (Bi)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Bismuth	µg	< 5	< 5	< 5
Boron (B)	Preparation	2012-10-23	2012-10-23	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Boron	µg	< 20	< 20	< 20

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)		
	Lab. No.	**2233441**	**2233461**	**2233467**
	Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
		#1	#3	Blank
	Matrix	Filtre	Filtre	Filtre
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank
		F+S	F+S	F+S
Incinerator	Date sampled	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19
Parameter(s)				
Method				
Reference				
Cadmium (Cd)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Cadmium	µg	1.2	4.5	< 0.5
Calcium (Ca)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Calcium	µg	73	1680	13
Chromium (Cr)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Chromium	µg	2.8	12.7	0.9
Cobalt (Co)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Cobalt	µg	< 0.5	< 0.5	< 0.5
Copper (Cu)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Copper	µg	14.5	85.2	< 0.5
Iron (Fe)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Iron	µg	33.0	528	11.5
Lead (Pb)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Lead	µg	29.5	147	0.7

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Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Lab. No.	Sample(s) 2233441	2233461	2233467
	Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
		#1	#3	Blank
	Matrix	Filtre	Filtre	Filtre
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank
Incinerator		F+S	F+S	F+S
	Date sampled	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19
Parameter(s)				
Method Reference				
Lithium (Li)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-25
	Sequential No.	405260	405260	405260
Lithium	µg	2.6	10.2	< 0.5
Magnesium (Mg)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Magnesium	µg	10.4	78.3	< 2.6
Manganese (Mn)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Manganese	µg	1.1	11.0	< 0.3
Mercury (Hg)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP-MS E-A-EN-EN-CHI-PC-MD025 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Mercury	µg	< 0.1	< 0.1	< 0.1
Molybdenum (Mo)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Molybdenum	µg	1	7	< 1
Nickel (Ni)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Nickel	µg	1.1	3.5	< 0.5
Phosphorus (P)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Phosphorus	µg	< 100	1200	< 100

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	2233441	2233461	2233467
Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
	#1	#3	Blank
Matrix	Filtre	Filtre	Filtre
Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
Site sampled	Meadowbank	Meadowbank	Meadowbank
	F+S	F+S	F+S
Incinerator			
Date sampled	NA	NA	NA
Date received	2012-10-19	2012-10-19	2012-10-19

Parameter(s) / Method Reference				
Potassium (K)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Potassium	µg	4510	19100	< 25
Selenium (Se)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Selenium	µg	< 0.5	0.7	< 0.5
Silicon (Si)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Silicon	µg	74	315	73
Silver (Ag)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Silver	µg	0.9	1.4	< 0.5
Sodium (Na)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Sodium	µg	3220	10600	61
Strontium (Sr)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP	Analysis	2012-10-23	2012-10-23	2012-10-23
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Strontium	µg	< 0.7	1.6	< 0.7
Tellurium (Te)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP	Analysis	2012-10-25	2012-10-25	2012-10-25
E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Sequential No.	405260	405260	405260
Tellurium	µg	< 1	< 1	< 1

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Lab. No.	Sample(s) 2233441	2233461	2233467
	Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
		#1	#3	Blank
	Matrix	Filtre	Filtre	Filtre
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank
		F+S	F+S	F+S
Incinerator	Date sampled	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19
Parameter(s)				
Method Reference				
Thallium (Tl)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Thallium	µg	< 3	< 3	< 3
Tin (Sn)	Preparation	2012-10-22	2012-10-22	2012-10-22
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Tin	µg	7.9	74.7	< 0.5
Titanium (Ti)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-25
	Sequential No.	405260	405260	405260
Titanium	µg	< 0.5	4.3	< 0.5
Uranium (U)	Preparation	2012-10-23	2012-10-23	2012-10-23
Metals by ICP-MS E-A-EN-EN-CHI-PC-MD025 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-25	2012-10-25
	Sequential No.	405260	405260	405260
Uranium	µg	< 0.05	< 0.05	< 0.05
Vanadium (V)	Preparation	2012-10-23	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-25	2012-10-23	2012-10-25
	Sequential No.	405260	405260	405260
Vanadium (V)	µg	0.2	< 0.3	< 0.1
Zinc (Zn)	Preparation	2012-10-22	2012-10-22	2012-10-23
Metals by ICP E-A-EN-EN-CHI-PC-MD017 (REF: MA. 200 - Mét 1.2, CEAEQ)	Analysis	2012-10-23	2012-10-23	2012-10-23
	Sequential No.	405260	405260	405260
Zinc	µg	69.7	1390	1.0

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Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

	Sample(s)		
Lab. No.	**2233441**	**2233461**	**2233467**
Your Reference	12089-3861+3862+3863	12089-3877+3878+3879	12089-3885+3886
Matrix	Filtre	Filtre	Filtre
Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
Site sampled	Meadowbank	Meadowbank	Meadowbank
Date sampled	NA	NA	NA
Date received	2012-10-19	2012-10-19	2012-10-19

Parameter(s)
Method
Reference

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Pointe-Claire laboratory.

David Cajolet, chemist

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

		Sample(s)			
	Lab. No.	**2233448**	**2233449**	**2233463**	**2233465**
	Your Reference	12089-3865 (177ml)	12089-3866 (309ml)	12089-3881 (259ml)	12089-3882 (320ml)
	Matrix	Air	Air	Air	Air
	Sampled by	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno	Exova St-Bruno
	Site sampled	Meadowbank	Meadowbank	Meadowbank	Meadowbank
	Date sampled	NA	NA	NA	NA
	Date received	2012-10-19	2012-10-19	2012-10-19	2012-10-19
Parameter(s)					
Method Reference					
Volume	Preparation	-	-	-	-
Not applicable	Analysis	-	-	-	-
Not applicable	Sequential No.	NA	NA	NA	NA
Volume	mL	177	309	259	320

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Sample(s)

Lab. No.	**2233469**
Your Reference	12089-3888 (100ml)
Matrix	Air
Sampled by	Exova St-Bruno
Site sampled	Meadowbank
Date sampled	NA
Date received	2012-10-19

Parameter(s)		
Method Reference		
Volume	Preparation	-
Not applicable	Analysis	-
Not applicable	Sequential No.	NA
Volume	mL	100

Note 1: Results and comments, if any, relate only to samples submitted for analysis at the Pointe-Claire laboratory.

David Cajolet, chemist

David Cajolet 2009-0e9 QUÉBEC

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Chlorides (IC)					
Sequential ID No.: 405298					
Chloride	µg	< 100	< 100	510	446 - 604
Silver (Ag)					
Sequential ID No.: 405250					
Silver	µg	< 0.5	< 0.5	102	80 - 120
Silver (Ag)					
Sequential ID No.: 405260					
Silver	µg	< 0.5	< 0.5	NA	NA
Aluminum (Al)					
Sequential ID No.: 405250					
Aluminum	µg	< 10	< 10	105	80 - 120
Aluminum (Al)					
Sequential ID No.: 405260					
Aluminum	µg	< 10	< 10	NA	NA
Arsenic (As)					
Sequential ID No.: 405250					
Arsenic	µg	< 1	< 1	97	80 - 120
Arsenic (As)					
Sequential ID No.: 405260					
Arsenic	µg	< 0.5	< 0.5	NA	NA
Barium (Ba)					
Sequential ID No.: 405250					
Barium	µg	< 10	< 10	99	80 - 120
Barium (Ba)					
Sequential ID No.: 405260					
Barium	µg	< 0.5	< 0.5	NA	NA
Boron (B)					
Sequential ID No.: 405250					
Boron	µg	< 20	< 20	100	80 - 120
Beryllium (Be)					
Sequential ID No.: 405250					
Beryllium	µg	< 1	< 1	86	80 - 120
Beryllium (Be)					
Sequential ID No.: 405260					
Beryllium	µg	< 0.2	< 0.2	NA	NA

RDL : Reported Detection Limit

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Boron (B) Sequential ID No.: 405260					
Boron	µg	< 20	< 20	NA	NA
Bismuth (Bi) Sequential ID No.: 405250					
Bismuth	µg	< 1	< 1	102	80 - 120
Bismuth (Bi) Sequential ID No.: 405260					
Bismuth	µg	< 5	< 5	NA	NA
Calcium (Ca) Sequential ID No.: 405250					
Calcium	µg	< 20	< 20	476	400 - 600
Calcium (Ca) Sequential ID No.: 405260					
Calcium	µg	< 1	< 3	NA	NA
Cadmium (Cd) Sequential ID No.: 405250					
Cadmium	µg	< 0.5	< 0.5	98.1	80 - 120
Cadmium (Cd) Sequential ID No.: 405260					
Cadmium	µg	< 0.5	< 0.5	NA	NA
Cobalt (Co) Sequential ID No.: 405250					
Cobalt	µg	< 1	< 1	104	80 - 120
Cobalt (Co) Sequential ID No.: 405260					
Cobalt	µg	< 0.5	< 0.5	NA	NA
Chromium (Cr) Sequential ID No.: 405250					
Chromium	µg	< 1	< 1	104	80 - 120
Chromium (Cr) Sequential ID No.: 405260					
Chromium	µg	< 0.5	< 0.5	NA	NA
Copper (Cu) Sequential ID No.: 405250					
Copper	µg	< 1	< 1	120	80 - 120

RDL : Reported Detection Limit

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Copper (Cu)					
Sequential ID No.: 405260					
Copper	µg	< 0.5	< 0.5	NA	NA
Iron (Fe)					
Sequential ID No.: 405250					
Iron	µg	< 50	< 50	99	80 - 120
Iron (Fe)					
Sequential ID No.: 405260					
Iron	µg	< 0.5	< 0.5	NA	NA
Mercury (Hg)					
Sequential ID No.: 405250					
Mercury	µg	< 0.1	< 0.1	0.3	0.24 - 0.36
Mercury (Hg)					
Sequential ID No.: 405260					
Mercury	µg	< 0.1	< 0.1	NA	NA
Potassium (K)					
Sequential ID No.: 405250					
Potassium	µg	< 500	< 500	466	400 - 600
Potassium (K)					
Sequential ID No.: 405260					
Potassium	µg	< 25	< 25	NA	NA
Lithium (Li)					
Sequential ID No.: 405250					
Lithium	µg	< 1	< 1	89	80 - 120
Lithium (Li)					
Sequential ID No.: 405260					
Lithium	µg	< 0.5	< 0.5	NA	NA
Magnesium (Mg)					
Sequential ID No.: 405250					
Magnesium	µg	< 1	< 1	454	400 - 600
Magnesium (Mg)					
Sequential ID No.: 405260					
Magnesium	µg	< 0.5	< 0.5	NA	NA
Manganese (Mn)					
Sequential ID No.: 405250					
Manganese	µg	< 1	< 1	98	80 - 120

RDL : Reported Detection Limit

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Manganese (Mn) Sequential ID No.: 405260					
Manganese	µg	< 0.25	< 0.3	NA	NA
Molybdenum (Mo) Sequential ID No.: 405250					
Molybdenum	µg	< 1	< 1	95	80 - 120
Molybdenum (Mo) Sequential ID No.: 405260					
Molybdenum	µg	< 1	< 1	NA	NA
Sodium (Na) Sequential ID No.: 405250					
Sodium	µg	< 500	< 500	449	400 - 600
Sodium (Na) Sequential ID No.: 405260					
Sodium	µg	< 25	< 25	NA	NA
Nickel (Ni) Sequential ID No.: 405250					
Nickel	µg	< 1	< 1	104	80 - 120
Nickel (Ni) Sequential ID No.: 405260					
Nickel	µg	< 0.5	< 0.5	NA	NA
Phosphorus (P) Sequential ID No.: 405250					
Phosphorus	µg	< 100	< 100	95	80 - 120
Lead (Pb) Sequential ID No.: 405250					
Lead	µg	< 1	< 1	99	80 - 120
Lead (Pb) Sequential ID No.: 405260					
Lead	µg	< 0.5	< 0.5	NA	NA
Phosphorus (P) Sequential ID No.: 405260					
Phosphorus	µg	< 100	< 100	NA	NA
Antimony (Sb) Sequential ID No.: 405250					

RDL : Reported Detection Limit

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Antimony	µg	< 1	< 1	104	80 - 120
Antimony (Sb) Sequential ID No.: 405260					
Antimony	µg	< 0.5	< 0.5	NA	NA
Selenium (Se) Sequential ID No.: 405250					
Selenium	µg	< 1	< 1	96	80 - 120
Selenium (Se) Sequential ID No.: 405260					
Selenium	µg	< 0.5	< 0.5	NA	NA
Silicon extractable (Si) Sequential ID No.: 405250					
Silicium	µg	< 50	< 50	441	400 - 600
Silicon (Si) Sequential ID No.: 405260					
Silicon	µg	< 1	< 1	NA	NA
Tin (Sn) Sequential ID No.: 405250					
Tin	µg	< 1	< 1	99	80 - 120
Tin (Sn) Sequential ID No.: 405260					
Tin	µg	< 0.5	< 0.5	NA	NA
Strontium (Sr) Sequential ID No.: 405250					
Strontium	µg	< 1	< 1	96	80 - 120
Strontium (Sr) Sequential ID No.: 405260					
Strontium	µg	< 0.5	< 0.7	NA	NA
Tellurium (Te) Sequential ID No.: 405250					
Tellurium	µg	< 1	< 1	94	80 - 120
Tellurium (Te) Sequential ID No.: 405260					
Tellurium	µg	< 1	< 1	NA	NA

RDL : Reported Detection Limit

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Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results (CQ)

Parameters (Sequential ID No.)	Units	RDL	Blank	Certified Control Result	Certified Control Expected Range
Titanium (Ti)					
Sequential ID No.: 405250					
Titanium	µg	< 1	< 1	100	80 - 120
Titanium (Ti)					
Sequential ID No.: 405260					
Titanium	µg	< 0.5	< 0.5	NA	NA
Thallium (Tl)					
Sequential ID No.: 405250					
Thallium	µg	< 1	< 1	101	80 - 120
Thallium (Tl)					
Sequential ID No.: 405260					
Thallium	µg	< 2.5	< 3	NA	NA
Uranium (U)					
Sequential ID No.: 405250					
Uranium	µg	< 1	< 1	96	80 - 120
Uranium (U)					
Sequential ID No.: 405260					
Uranium	µg	< 0.05	< 0.05	NA	NA
Vanadium (V)					
Sequential ID No.: 405250					
Vanadium	µg	< 1	< 1	90	80 - 120
Vanadium (V)					
Sequential ID No.: 405260					
Vanadium (V)	µg	< 0.1	< 0.1	NA	NA
Zinc (Zn)					
Sequential ID No.: 405250					
Zinc	µg	< 7	< 7	96	80 - 120
Zinc (Zn)					
Sequential ID No.: 405260					
Zinc	µg	< 0.5	< 0.5	NA	NA

Comments

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results - Part 2

Parameters (Sequential ID No.)	Units	Duplicate Value 1	Duplicate Value 2	Difference (%)
Aluminum (Al)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Aluminum	µg	26	25	3.9
Antimony (Sb)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Antimony	µg	< 2	< 2	-
Arsenic (As)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Arsenic	µg	< 2	< 2	-
Barium (Ba)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Barium	µg	< 18	< 18	-
Beryllium (Be)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Beryllium	µg	< 2	< 2	-
Bismuth (Bi)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Bismuth	µg	< 2	< 2	-
Boron (B)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Boron	µg	< 35	< 35	-
Cadmium (Cd)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Cadmium	µg	< 0.9	< 0.9	-
Calcium (Ca)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Calcium	µg	77	75	2.6
Chlorides (IC)				
Sequential ID No: 405298	(Sample no)		(2233446)	
Chloride	µg	285000	310000	8.4
Chromium (Cr)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Chromium	µg	2	2	0.0

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Client: **Exova**

Request Number: 12-508329

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NA	R12-089	M. Christian St-Pierre

Quality Control Results - Part 2

Parameters (Sequential ID No.)	Units	Duplicate Value 1	Duplicate Value 2	Difference (%)
Cobalt (Co)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Cobalt	µg	< 2	< 2	-
Copper (Cu)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Copper	µg	< 2	< 2	-
Iron (Fe)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Iron	µg	< 89	< 89	-
Lead (Pb)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Lead	µg	2	2	0.0
Lithium (Li)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Lithium	µg	< 2	< 2	-
Magnesium (Mg)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Magnesium	µg	15	15	0.0
Manganese (Mn)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Manganese	µg	133	132	0.8
Mercury (Hg)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Mercury	µg	< 0.2	< 0.2	-
Molybdenum (Mo)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Molybdenum	µg	< 2	< 2	-
Nickel (Ni)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Nickel	µg	30	30	0.0
Phosphorus (P)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Phosphorus	µg	< 177	< 177	-

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results - Part 2

Parameters (Sequential ID No.)	Units	Duplicate Value 1	Duplicate Value 2	Difference (%)
Potassium (K)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Potassium	µg	< 885	< 885	-
Selenium (Se)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Selenium	µg	< 2	< 2	-
Silicon extractable (Si)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Silicium	µg	< 89	< 89	-
Silver (Ag)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Silver	µg	< 0.9	< 0.9	-
Sodium (Na)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Sodium	µg	< 885	< 885	-
Strontium (Sr)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Strontium	µg	< 2	< 2	-
Tellurium (Te)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Tellurium	µg	< 2	< 2	-
Thallium (Tl)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Thallium	µg	< 2	< 2	-
Tin (Sn)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Tin	µg	< 2	< 2	-
Titanium (Ti)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Titanium	µg	< 2	< 2	-
Uranium (U)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Uranium	µg	< 2	< 2	-

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Client: **Exova**

Request Number: 12-508329

P.O. Number	Your Project ID.	Project Manager
NA	R12-089	M. Christian St-Pierre

Quality Control Results - Part 2

Parameters (Sequential ID No.)	Units	Duplicate Value 1	Duplicate Value 2	Difference (%)
Vanadium (V)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Vanadium	µg	< 2	< 2	-
Zinc (Zn)				
Sequential ID No: 405250	(Sample no)		(2233448)	
Zinc	µg	< 12	< 12	-

A1-74

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Certificat d'analyse

No M691465, version 1

Émis le: 2012-11-28

Client: **EXOVA (St-Bruno)**
Mme Geneviève Sévigny
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No client: 12323
Tél.:
Téléc.:
No projet:
Bon de commande: CT-040753
No dossier MDDEP:

Projet:

Nature de l'échantillon: Liquide

No éch. / Description		Résultat	Unité	Norme	Analysé le
1762068 / 2233454 Imp 5-6-7					
#1 **Prélevé le: -** **Par: Client** **Reçu le: 2012-10-23**					
	Mercure (Hg)	<0.1	mg/L		2012-10-23
Remarques: Les résultats sont exprimés en ug total. Le volume total=339ml					
1762070 / 2233466 Imp 5-6-7					
#3 **Prélevé le: -** **Par: Client** **Reçu le: 2012-10-23**					
	Mercure (Hg)	<0.10	mg/L		2012-10-23
Remarques: Les résultats sont exprimée en ug total. Le volume total=540ml.					
1762071 / 2233471 Blank					
Prélevé le: - **Par: Client** **Reçu le: 2012-10-23**					
	Mercure (Hg)	<0.02	mg/L		2012-10-23
Remarques: Les résultats sont exprimée en ug total. Le volume total=100ml.					

Méthode d'analyse	Description	Référence externe	Procédure interne
Mercure	Vapeur froide et AA	MA.203-Hg 1.0	ILCE-032

France Luneau, Chimiste, chargée de projet

Nader Daoud, Chimiste, superviseur

A1-75

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Annexe au certificat d'analyses

M691465 version 1

Description	Unités	Limite de détection	Blanc	Matériaux de référence		Récupération		Duplicata	
				% obtenu	limites (%)	% obtenu	limites (%)	% écart	limites (%)
									Date d'analyse: 2012-10-23
Méthode d'analyse: Vapeur froide et AA / MA.203-Hg 1.0 / ILCE-032									No séquence: CS321769
			Blanc				-		-
Mercure (Hg)	mg/L	0.0002	<0.0005	100	80 - 120	-	-	-	-

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AGAT Laboratoires

9770 ROUTE TRANSCANADIENNE
ST. LAURENT, QUEBEC
CANADA H4S 1V9
TEL (514)337-1000
FAX (514)333-3046
http://www.agatlabs.com

NOM DU CLIENT: EXOVA
1390 RUE HOCQUART
ST-BRUNO DE DE MONTARVILLE, QC J3V6E1
(450) 441-5880

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

N° DE PROJET: R12-089

N° BON DE TRAVAIL: 12M653120

HAUTE RÉSOLUTION VÉRIFIÉ PAR: Marc-André Desjardins, chimiste

DATE DU RAPPORT: 2012-10-31

VERSION*: 2

NOMBRE DE PAGES: 7

Si vous desirez de l'information concernant cette analyse, S.V.P. contacter votre chargé de projets au (514) 337-1000

NOTES
VERSION 2:Transfert des resultats sur bon de travail 12M666925 selon demande du client. 2012-11-23.

Nous disposerons des échantillons dans les 30 jours suivants les analyses. S.V.P. Contactez le laboratoire si vous désirez avoir un délai d'entreposage

AGAT Laboratoires

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Certificat d'analyse

N° BON DE TRAVAIL: 12M653120

N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA

PRÉLEVÉ PAR:

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

LIEU DE PRÉLÈVEMENT:Exova St-Bruno

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-10-16 **DATE DU RAPPORT: 2012-10-31**

				#1		#3		Blank
	DESCRIPTION D'ÉCHANTILLON:			12089.1+.2+.3+. 4+.5+.7		12089.20+.21+. 22+.23+.24+.26		12089.30+.31+. 32+.33+.34+.35
	MATRICE:			Liquide		Liquide		Liquide
	DATE D'ÉCHANTILLONNAGE:			2012-10-12		2012-10-12		2012-10-12
Paramètre	Unités	C / N	LDR	3820598	LDR	3820606	LDR	3820612
2,3,7,8-TCDD (pg total)	pg		0.5	<0.5	0.5	4.5	0.4	<0.4
1,2,3,7,8 PeCDD (pg total)	pg		0.8	28.5	0.9	17.3	0.7	<0.7
1,2,3,4,7,8 HxCDD (pg total)	pg		1	22	0.9	13.1	0.6	<0.6
1,2,3,6,7,8 HxCDD (pg total)	pg		1	116	0.9	27.2	0.6	<0.6
1,2,3,7,8,9 HxCDD (pg total)	pg		1	185	0.9	45.7	0.6	1.0
1,2,3,4,6,7,8 HpCDD (pg total)	pg		2	399	1	160	1	2
OCDD (pg total)	pg		1	217	1	273	0.9	4.4
2,3,7,8 TCDF (pg total)	pg		0.5	17.7	0.7	36.4	0.5	<0.5
1,2,3,7,8 PeCDF (pg total)	pg		0.8	19.7	1	42	0.7	<0.7
2,3,4,7,8-PeCDF (pg total)	pg		0.8	56.8	1	91	0.7	0.8
1,2,3,4,7,8 HxCDF (pg total)	pg		0.7	100	1	185	0.7	1.8
1,2,3,6,7,8 HxCDF (pg total)	pg		0.7	41.1	1	71	0.7	1.0
2,3,4,6,7,8-HxCDF (pg total)	pg		0.7	83.6	1	148	0.7	1.7
1,2,3,7,8,9 HxCDF (pg total)	pg		0.8	14.5	1	7	0.9	<0.9
1,2,3,4,6,7,8 HpCDF (pg total)	pg		1	137	2	275	1	<1
1,2,3,4,7,8,9 HpCDF (pg total)	pg		1	23	3	38	2	<2
OCDF (pg total)	pg		0.9	69.7	1	130	0.8	2.1
Sommation des Tétrachlorodibenzodioxines	pg		0.5	463	0.5	159	0.4	1.5
Sommation des Pentachlorodibenzodioxines	pg		0.8	1400	0.9	315	0.7	4.9
Sommation des Hexachlorodibenzodioxines	pg		1	2160	0.9	376	0.6	5.1
Sommation des Heptachlorodibenzodioxines	pg		2	1170	1	327	1	6
Sommation des PCDDs	pg		2	5430	1	1450	1	22
Sommation des Tétrachlorodibenzofuranes	pg		0.5	772	0.7	994	0.5	4.7

D-17-8

Certifié par:

AGAT Laboratoires

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Certificat d'analyse

N° BON DE TRAVAIL: 12M653120
N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA
PRÉLEVÉ PAR:

À L'ATTENTION DE: CHRISTIAN ST-PIERRE
LIEU DE PRÉLÈVEMENT:Exova St-Bruno

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-10-16 — DATE DU RAPPORT: 2012-10-31

				#1		#3		Blank
DESCRIPTION D'ÉCHANTILLON:				12089.1+.2+.3+. 4+.5+.7		12089.20+.21+. 22+.23+.24+.26		12089.30+.31+. 32+.33+.34+.35
MATRICE:				Liquide		Liquide		Liquide
DATE D'ÉCHANTILLONNAGE:				2012-10-12		2012-10-12		2012-10-12
Paramètre	Unités	C / N	LDR	3820598	LDR	3820606	LDR	3820612
Sommation des Pentachlorodibenzofuranes	pg		0.8	671	1	913	0.7	3.9
Sommation des Hexachlorodibenzofuranes	pg		0.8	526	1	769	0.9	6.8
Sommation des Heptachlorocibenzofuranes	pg		1	248	3	456	2	<2
Sommation des PCDFs	pg		1	2290	3	3260	2	17
2,3,7,8-Tetra CDD (TEF 1.0)	TEQ			0		4.50		0
1,2,3,7,8-Penta CDD (TEF 0.5)	TEQ			14.2		8.65		0
1,2,3,4,7,8-Hexa CDD (TEF 0.1)	TEQ			2.17		1.31		0
1,2,3,6,7,8-Hexa CDD (TEF 0.1)	TEQ			11.6		2.72		0
1,2,3,7,8,9-Hexa CDD (TEF 0.1)	TEQ			18.5		4.57		0.0960
1,2,3,4,6,7,8-Hepta CDD (TEF 0.01)	TEQ			3.99		1.60		0.0238
Octa CDD (TEF 0.001)	TEQ			0.217		0.273		0.00444
2,3,7,8-Tetra CDF (TEF 0.1)	TEQ			1.77		3.64		0
1,2,3,7,8-Penta CDF (TEF 0.05)	TEQ			0.985		2.12		0
2,3,4,7,8-Penta CDF (TEF 0.5)	TEQ			28.4		45.6		0.380
1,2,3,4,7,8-Hexa CDF (TEF 0.1)	TEQ			10.0		18.5		0.180
1,2,3,6,7,8-Hexa CDF (TEF 0.1)	TEQ			4.11		7.05		0.0980
2,3,4,6,7,8-Hexa CDF (TEF 0.1)	TEQ			8.36		14.8		0.166
1,2,3,7,8,9-Hexa CDF (TEF 0.1)	TEQ			1.45		0.652		0
1,2,3,4,6,7,8-Hepta CDF (TEF 0.01)	TEQ			1.37		2.75		0
1,2,3,4,7,8,9-Hepta CDF (TEF 0.01)	TEQ			0.234		0.381		0
Octa CDF (TEF 0.001)	TEQ			0.0697		0.130		0.00208
Sommation des PCDDs et PCDFs (TEF)				107		119		0.950
13C-2378-TCDF	%			79		72		74
13C-12378-PeCDF	%			86		84		87

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Certificat d'analyse

N° BON DE TRAVAIL: 12M653120

N° DE PROJET: R12-089

NOM DU CLIENT: EXOVA

PRÉLEVÉ PAR:

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

LIEU DE PRÉLÈVEMENT:Exova St-Bruno

Dioxines et furanes - Air (train d'échantillonnage)

DATE DE RÉCEPTION: 2012-10-16

DATE DU RAPPORT: 2012-10-31

				#1		#3		Blank
				12089.1+.2+.3+.		12089.20+.21+.		12089.30+.31+.
	DESCRIPTION D'ÉCHANTILLON:			4+.5+.7		22+.23+.24+.26		32+.33+.34+.35
	MATRICE:			Liquide		Liquide		Liquide
	DATE D'ÉCHANTILLONNAGE:			2012-10-12		2012-10-12		2012-10-12
Paramètre	Unités	C / N	LDR	3820598	LDR	3820606	LDR	3820612
13C-23478-PeCDF	%			88		88		94
13C-123478-HxCDF	%			79		78		77
13C-123678-HxCDF	%			68		66		67
13C-234678-HxCDF	%			70		67		67
13C-123789-HxCDF	%			75		74		76
13C-1234678-HpCDF	%			66		68		65
13C-1234789-HpCDF	%			73		73		70
13C-2378-TCDD	%			80		75		82
13C-12378-PeCDD	%			92		89		95
13C-123478-HxCDD	%			77		78		76
13C-123678-HxCDD	%			73		71		77
13C-1234678-HxCDD	%			77		76		74
13C-OCDD	%			62		59		60

Commentaires: LDR - Limite de détection rapportée; C / N - Critères Normes

3820598-3820612 Le blanc a été soustrait de l'échantillon.
Le résultat en pg total correspond au composite de chacune des parties du train d'échantillonnage.

D-1-00

Certifié par:

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Contrôle de qualité

NOM DU CLIENT: EXOVA
N° DE PROJET: R12-089
PRÉLEVÉ PAR:

N° BON DE TRAVAIL: 12M653120
À L'ATTENTION DE: CHRISTIAN ST-PIERRE
LIEU DE PRÉLÈVEMENT:Exova St-Bruno

Analyse haute résolution

Date du rapport: 2012-10-31			DUPLICATA			MATÉRIAU DE RÉFÉRENCE				BLANC FORTIFIÉ			ÉCH. FORTIFIÉ		
PARAMÈTRE	Lot	N° éch.	Dup #1	Dup #2	% d'écart	Blanc de méthode	% Récup.	Limites Inf.	Limites Sup.	% Récup.	Limites Inf.	Limites Sup.	% Récup.	Limites Inf.	Limites Sup.
Dioxines et furanes - Air (train d'échantillonnage)															
2,3,7,8-TCDD (pg total)	1	NA	NA	NA	0.0	< 0.4	102%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8 PeCDD (pg total)	1	NA	NA	NA	0.0	< 0.5	105%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8 HxCDD (pg total)	1	NA	NA	NA	0.0	< 0.4	98%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,6,7,8 HxCDD (pg total)	1	NA	NA	NA	0.0	< 0.4	100%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8,9 HxCDD (pg total)	1	NA	NA	NA	0.0	< 0.4	101%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,6,7,8 HpCDD (pg total)	1	NA	NA	NA	0.0	1.0	101%	70%	130%	NA	70%	130%	NA	70%	130%
OCDD (pg total)	1	NA	NA	NA	0.0	14	98%	70%	130%	NA	70%	130%	NA	70%	130%
2,3,7,8 TCDF (pg total)	1	NA	NA	NA	0.0	< 0.3	103%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8 PeCDF (pg total)	1	NA	NA	NA	0.0	0.5	102%	70%	130%	NA	70%	130%	NA	70%	130%
2,3,4,7,8-PeCDF (pg total)	1	NA	NA	NA	0.0	< 0.3	101%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8 HxCDF (pg total)	1	NA	NA	NA	0.0	0.4	104%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,6,7,8 HxCDF (pg total)	1	NA	NA	NA	0.0	< 0.3	103%	70%	130%	NA	70%	130%	NA	70%	130%
2,3,4,6,7,8-HxCDF (pg total)	1	NA	NA	NA	0.0	< 0.3	108%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,7,8,9 HxCDF (pg total)	1	NA	NA	NA	0.0	< 0.4	99%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,6,7,8 HpCDF (pg total)	1	NA	NA	NA	0.0	< 0.3	101%	70%	130%	NA	70%	130%	NA	70%	130%
1,2,3,4,7,8,9 HpCDF (pg total)	1	NA	NA	NA	0.0	< 0.5	101%	70%	130%	NA	70%	130%	NA	70%	130%
OCDF (pg total)	1	NA	NA	NA	0.0	1.3	100%	70%	130%	NA	70%	130%	NA	70%	130%

Certifié par:

A1-81

La procédure des Laboratoires AGAT concernant les signatures et les signataires se conforme strictement aux exigences d'accréditation ISO 17025:2005 comme le requiert, lorsque applicable, CALA, CCN et MDDEP. Toutes les signatures sur les certificats d'AGAT sont protégées par des mots de passe et les signataires rencontrent les exigences des domaines d'accréditation ainsi que les exigences régionales approuvées par CALA, CCN et MDDEP.

AGAT Laboratoires

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Sommaire de méthode

NOM DU CLIENT: EXOVA

N° DE PROJET: R12-089

PRÉLEVÉ PAR:

N° BON DE TRAVAIL: 12M653120

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

LIEU DE PRÉLÈVEMENT:Exova St-Bruno

PARAMÈTRE	PRÉPARÉ LE	ANALYSÉ LE	AGAT P.O.N.	RÉFÉRENCE DE LITTÉRATURE	TECHNIQUE ANALYTIQUE
Analyse haute résolution					
2,3,7,8-TCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8 PeCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8 HxCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8 HxCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9 HxCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8 HpCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
OCDD (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8 TCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8 PeCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,7,8-PeCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8 HxCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8 HxCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,6,7,8-HxCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9 HxCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8 HpCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8,9 HpCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
OCDF (pg total)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Tétrachlorodibenzodioxines	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Pentachlorodibenzodioxines	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Hexachlorodibenzodioxines	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Heptachlorodibenzodioxines	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDDs	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Tétrachlorodibenzofuranes	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Pentachlorodibenzofuranes	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Hexachlorodibenzofuranes	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des Heptachlorodibenzofuranes	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDFs	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8-Tetra CDD (TEF 1.0)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8-Penta CDD (TEF 0.5)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8-Hexa CDD (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8-Hexa CDD (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9-Hexa CDD (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8-Hepta CDD (TEF 0.01)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Octa CDD (TEF 0.001)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,7,8-Tetra CDF (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8-Penta CDF (TEF 0.05)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,7,8-Penta CDF (TEF 0.5)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8-Hexa CDF (TEF 0.1)	2012-10-25	2012-10-27	HR_151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,6,7,8-Hexa CDF (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
2,3,4,6,7,8-Hexa CDF (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,7,8,9-Hexa CDF (TEF 0.1)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,6,7,8-Hepta CDF (TEF 0.01)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
1,2,3,4,7,8,9-Hepta CDF (TEF 0.01)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS

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Sommaire de méthode

NOM DU CLIENT: EXOVA

N° DE PROJET: R12-089

PRÉLEVÉ PAR:

N° BON DE TRAVAIL: 12M653120

À L'ATTENTION DE: CHRISTIAN ST-PIERRE

LIEU DE PRÉLÈVEMENT:Exova St-Bruno

PARAMÈTRE	PRÉPARÉ LE	ANALYSÉ LE	AGAT P.O.N.	RÉFÉRENCE DE LITTÉRATURE	TECHNIQUE ANALYTIQUE
Octa CDF (TEF 0.001)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
Sommation des PCDDs et PCDFs (TEF)	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-2378-TCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-12378-PeCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-23478-PeCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123478-HxCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123678-HxCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-234678-HxCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123789-HxCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234678-HpCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234789-HpCDF	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-2378-TCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-12378-PeCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123478-HxCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-123678-HxCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-1234678-HxCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS
13C-OCDD	2012-10-25	2012-10-27	HR-151-5400	CEAEQ MA.400 - DF 1.0	HRMS

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