



**A.Lanfranco
& Associates Inc.**

Environmental Consultants

Prepared for

METRO VANCOUVER

Metrotower III

4515 Central Boulevard

Burnaby, BC V5H 0C6

WASTE-TO-ENERGY FACILITY

Appendices of Emissions Testing Report

February/March 2026 Survey

First Quarter 2026

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APPENDIX – A

QUALITY ASSURANCE / QUALITY CONTROL RESULTS

Quality assurance / quality control (QA/QC) is divided into four categories: administration, preparation, testing, and analysis. The following sections detail results found for the above four categories.

Administration:

- All field, process, and analytical data was reviewed to ensure data integrity and accuracy.
- Duplicate proof of draft and final report, including data entry, conducted.

Preparation:

- All glassware cleaned
- Blank samples of reagents collected.

Testing:

- Stack diameter and absence of cyclonic flow confirmed
- Calibrated magnehelic used for all velocity measurements
- All trains past pre- and post- leak checks.
- Isokinetics all within $100\% \pm 10\%$.

Analysis:

- Trace Metals and Mercury analysis conducted at Element Labs, Surrey, B.C.
- Acid Gases (HF/HCl/NH₃) analysis conducted at Element Labs in Surrey, B.C.
- Nitrous Oxide (N₂O) analysis conducted at Bureau Veritas in Mississauga, ON.
- Volatile Organic Compounds (VOC) analysis conducted at ALS Environmental in Simi Valley, CA.
- Particulate analysis conducted at A. Lanfranco and Associates Inc., Surrey, BC.
- Chain of Custody protocols followed for all samples.
- Acceptable blank values for all sample types. All samples blank corrected.

Sample Type	Blank Value		
First Quarter 2026	Unit 1	Unit 2	Unit 3
Filter	0.5 mg	0.2 mg	0.2 mg
Front Half Washings	-0.1 mg	-0.5 mg	0.5 mg
Mercury Front	<0.02 ug	<0.02 ug	<0.02 ug
Mercury Back	<0.16 ug	<0.17 ug	<0.17 ug
Trace Metals Front *	<59.5 ug	<41.0 ug	<52.7 ug
Trace Metals Back*	<45.8 ug	<37.7 ug	<46.2 ug
Ammonia	67.7 ug	<2.3 ug	<2.8 ug
Fluoride	<60 ug	<40 ug	<50 ug
Chloride	<100 ug	<70 ug	<80 ug

Sum of all reported elements except Hg*

APPENDIX - B

CALCULATIONS

Appendix B Calculations

The following sections show the equations and define the variables that were used for this survey. The equations are organized in three sections. Equations 1-11 were used to calculate particulate concentration at standard conditions on a dry basis. Equations 12-26 were used to sample within the $100 \pm 10\%$ isokinetic variation and to confirm that sampling meets this isokinetic variation threshold. Equations 27-29 were used to calculate the volumetric flowrate of the stack flue gas.

App B.1 Contaminant Concentration Calculations

$$c = \frac{m}{V_{std}} \quad \text{Equation 1}$$

$$m_{part} = m_{filter} + m_{pw} \quad \text{Equation 2}$$

$$m_i = m_{ana,i} - m_{blank} \quad \text{Equation 3}$$

$$V_{std} = \frac{V_{std(imp)}}{35.315} \quad \text{Equation 4}$$

$$V_{std(imp)} = \frac{V_{samp} \times y \times P_m \times (T_{std} + 459.67)}{P_{std} \times (T_{m(ave)} + 459.67)} \quad \text{Equation 5}$$

$$V_{samp} = V_{final} - V_{init} \quad \text{Equation 6}$$

$$P_m = P_B + \frac{\Delta H_{ave}}{13.6} \quad \text{Equation 7}$$

$$\Delta H_{ave} = \frac{1}{n} \sum_{i=1}^n \Delta H_{i(act)}, \text{ where } n = \text{the number of points} \quad \text{Equation 8}$$

$$OC = \frac{20.9 - \%O_{2c}}{20.9 - \%O_{2m}} \quad \text{Equation 9}$$

$$\%O_{2m} = \frac{1}{n} \sum_{i=1}^n \%O_{2i}, \text{ where } n = \text{the number of } O_2 \text{ measurements} \quad \text{Equation 10}$$

$$\%CO_{2m} = \frac{1}{n} \sum_{i=1}^n \%CO_{2i}, \text{ where } n = \text{the number of } CO_2 \text{ measurements} \quad \text{Equation 11}$$

Appendix B Calculations

Where,

c	= Contaminant concentration
m	= Contaminant mass
m_i	= Net analytical mass (mg, ng, or μg)
$m_{ana,i}$	= Analytical mass (mg, ng, or μg)
m_{blank}	= Blank analytical mass (mg, ng, or μg)
m_{part}	= Total particulate mass (mg)
m_{filter}	= Net particulate gain from filter (mg)
m_{pw}	= Net particulate gain from probe wash (mg)
$V_{std(imp)}$	= Sample volume at standard conditions (ft^3)
V_{std}	= Sample volume at standard conditions (m^3)
V_{samp}	= Sample volume at actual conditions (ft^3)
V_{final}	= Final gas meter reading (ft^3)
V_{init}	= Initial gas meter reading (ft^3)
T_{std}	= Standard temperature (68 °F)
T_m	= Gas meter temperature (°F)
$T_{m(ave)}$	= Average gas meter temperature (°F)
P_m	= Absolute meter pressure (inches of Hg)
P_B	= Barometric pressure (inches of Hg)
ΔH_{ave}	= Average of individual point orifice pressures (inches of H_2O)
$\Delta H_{i(act)}$	= Individual recorded point orifice pressures (inches of H_2O)
OC	= Oxygen correction factor (dimensionless)
$\%O_{2c}$	= Oxygen concentration to correct to (% dry basis)
$\%O_{2m}$	= Average measured stack gas oxygen concentration (% dry basis)
$\%CO_{2m}$	= Average measured stack gas oxygen concentration (% dry basis)

Equation 1 is the general concentration calculation used for all contaminants. The contaminant mass, m , is the net analytic mass for the given contaminant. For particulate, m is the sum of the mass contributed from probe washing and filter particulate.

Appendix B Calculations

App B.2 Isokinetic Variation Calculations

$$\Delta H_i = \frac{2.62 \times 10^7 \times c_p \times A_n \times (1 - B_{wo}) \times M_D \times (T_m + 459.67) \times \Delta p_i}{k_o \times M_w \times (T_{stk} + 459.67)} \quad \text{Equation 12}$$

$$R_m = 85.49 \times c_p \times \sqrt{\Delta p_i} \times \sqrt{\frac{(T_{stk_i} + 459.67)}{M_w \times P_B}} \times 60 \times A_n \times \frac{(T_{m_i} + 459.67) \times (1 - B_{wo})}{(T_{stk_i} + 459.67) \times y} \quad \text{Equation 13}$$

$$A_n = \pi \left(\frac{d_n}{24} \right)^2 \quad \text{Equation 14}$$

$$M_w = M_D \times (1 - B_{wo}) + 18 \times B_{wo} \quad \text{Equation 15}$$

$$M_D = 0.44 \times \%CO_2 + 0.32 \times \%O_2 + 0.28 \times (100 - \%CO_2 - \%O_2) \quad \text{Equation 16}$$

$$T_{stk} = \frac{1}{n} \sum_{i=1}^n T_{stk_i}, \text{ where } n = \text{the number of points} \quad \text{Equation 17}$$

$$B_{wo} = \frac{V_{cond}}{V_{cond} + V_{std(imp)}} \quad \text{Equation 18}$$

$$V_{cond} = 0.04707 \times V_{gain} \quad \text{Equation 19}$$

$$Iso = \frac{1}{n} \sum_{i=1}^n Iso_i, \text{ where } n = \text{the number of points} \quad \text{Equation 20}$$

$$Iso_i = \frac{v_{nzi}}{v_i} \quad \text{Equation 21}$$

$$v_i = 85.49 \times c_p \times \sqrt{\Delta p_i} \times \sqrt{\frac{(T_{stk_i} + 459.67)}{(P_{stk} \times M_w)}} \quad \text{Equation 22}$$

$$v_{nzi} = \frac{(V_i - V_{i-1}) \times y \times (T_{stk_i} + 459.67) \times (P_B + \frac{\Delta H_{i(act)}}{13.6})}{A_n \times t_i \times 60 \times (T_{m(i)} + 459.67) \times P_{stk} \times (1 - B_{wo})} \quad \text{Equation 23}$$

$$P_{stk} = P_B + \frac{P_g}{13.6} \quad \text{Equation 24}$$

Appendix B Calculations

$$v_{stk} = \frac{1}{n} \sum_{i=1}^n v_i, \text{ where } n = \text{the number of points}$$

Equation 25

$$v_{nz} = \frac{1}{n} \sum_{i=1}^n v_{nzi}, \text{ where } n = \text{the number of points}$$

Equation 26

Where,

A_n	= Nozzle area (ft ²)
d_n	= Diameter of nozzle (inches)
c_p	= Pitot coefficient (dimensionless)
Δp_i	= Individual point differential pressures (inches of H ₂ O)
T_{stk}	= Average flue gas temperature (°F), second subscript i, indicates individual point measurements
$\Delta H_{i(act)}$	= Calculated individual point orifice pressures (inches of H ₂ O)
P_g	= Stack Static pressure (inches of H ₂ O)
P_{stk}	= Absolute stack pressure (inches of Hg)
M_w	= Wet gas molecular weight (g/gmol)
M_D	= Dry gas molecular weight (g/gmol)
%CO ₂	= Stack gas carbon dioxide concentration (% dry basis)
%O ₂	= Stack gas oxygen concentration (% dry basis)
B_{wo}	= Stack gas water vapour, proportion by volume
V_{cond}	= Total volume of water vapor collected, corrected to standard conditions (ft ³)
V_{gain}	= Condensate gain of impinger contents (mL)
P_{std}	= Standard pressure (29.92 inches of Hg)
V_{stk}	= Average flue gas velocity (ft/sec)
v_i	= Individual point flue gas velocity (ft/sec)
v_{nz}	= Average velocity at nozzle(ft/sec)
v_{nzi}	= Individual point velocity at nozzle(ft/sec)
ISO_i	= Individual point isokinetic variation (%)
ISO	= Average isokinetic variation (%)
R_m	= Isokinetic sampling rate (ft ³ /min)

App B.3 Volumetric Flowrate Calculations

$$Q_S = Q_A \times \frac{(T_{Std} + 459.67)}{(T_{Stk} + 459.67)} \times \frac{P_{Stk}}{P_{Std}} \quad \text{Equation 27}$$

$$Q_A = \frac{v_{stk} \times 60 \times A_{stk}}{35.315} \quad \text{Equation 28}$$

$$A_{stk} = \pi \left(\frac{d}{24} \right)^2 \quad \text{Equation 29}$$

Where,

Q_A	= Actual flowrate (Am^3/min)
Q_S	= Flowrate (m^3/min) at standard conditions on a dry basis
A_{stk}	= Area of stack (ft^2)
d	= Diameter of stack (inches)

APPENDIX - C

LABORATORY RESULTS

Appendix C - Particulate Analysis

Client: Metro Vancouver
Source: Units 1, 2, and 3

Sample Date: February 4-5, March 5-6, 2026
Location: WTE (Burnaby, B.C.)

A. Lanfranco & Associates Standard Operating Procedure:

SOP 1.2.1 Gravimetric determination of total particulate matter

Filter Collection:

Test #	Initial (grams)	Final (grams)	Net Difference (grams)	Blank Adjusted (grams)
Unit 1 Blank	0.4324	0.4329	0.0005	
Unit 1 Run 1	0.4370	0.4378	0.0008	0.0003
Unit 1 Run 2	0.4352	0.4358	0.0006	0.0001
Unit 1 Run 3	0.4359	0.4373	0.0014	0.0009
Unit 2 Blank	0.4325	0.4327	0.0002	
Unit 2 Run 1	0.4349	0.4356	0.0007	0.0005
Unit 2 Run 2	0.4344	0.4346	0.0002	ND
Unit 2 Run 3	0.4306	0.4311	0.0005	0.0003
Unit 3 Blank	0.4334	0.4336	0.0002	
Unit 3 Run 1	0.4321	0.4325	0.0004	0.0002
Unit 3 Run 2	0.4357	0.4361	0.0004	0.0002
Unit 3 Run 3	0.4353	0.4355	0.0002	ND

Front Half Washings:

Test #	Initial (grams)	Final (grams)	Net Difference (grams)	Blank Adjusted (grams)
Unit 1 Blank	118.9301	118.9300	-0.0001	
Unit 1 Run 1	84.8089	84.8136	0.0047	0.0048
Unit 1 Run 2	122.6482	122.6518	0.0036	0.0037
Unit 1 Run 3	108.7370	108.7393	0.0023	0.0024
Unit 2 Blank	112.9613	112.9608	-0.0005	
Unit 2 Run 1	85.7013	85.7052	0.0039	0.0044
Unit 2 Run 2	110.9574	110.9591	0.0017	0.0022
Unit 2 Run 3	119.4285	119.4328	0.0043	0.0048
Unit 3 Blank	125.3870	125.3875	0.0005	
Unit 3 Run 1	86.9715	86.9733	0.0018	0.0013
Unit 3 Run 2	117.3465	117.3499	0.0034	0.0029
Unit 3 Run 3	110.7382	110.7388	0.0006	0.0001

Task	Unit	Personnel	Date	Quality Control	Y/N
Filter Recovery:	Unit 1	J. Ching	6-Mar-26	Adequate PW volume:	Y
	Unit 2	J. Ching	4-Feb-26	No sample leakage:	Y
	Unit 3	L. Agassiz	4-Feb-26	Filter not compromised:	Y
PW Initial Analysis:	Unit 1	L. Forrer	11-Mar-26		
	Unit 2	J. Ching	6-Feb-26		
	Unit 3	J. Ching	6-Feb-26		
PW, Filter Final Analysis:	Unit 1	L. Forrer	13-Mar-26		
	Unit 2	J. Ching	11-Feb-26		
	Unit 3	J. Ching	11-Feb-26		
Data Entered to Computer:	All	C. Lanfranco	20-Mar-26		

Comments:

No problems encountered in sample analysis.

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Metals and Hg Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883214 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248859 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Metals and Hg Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883214 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248859 Report Type: Final Report
Attn: Missy		
Sampled By:		
Company:		

		Reference Number	1883214-1	1883214-2	1883214-3
		Sample Date	Mar 05, 2026	Mar 06, 2026	Mar 06, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit 1 Run 1 (MV Unit 1 Run 1 + 4 Bottles) / 20.8 °C	Unit 1 Run 2 (MV Unit 1 Run 2 + 4 Bottles) / 20.8 °C	Unit 1 Run 3 (MV Unit 1 Run 3 + 4 Bottles) / 20.8 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	10	20	10	5
Antimony	µg	<2	<2	<2	2.5
Arsenic	µg	10	11	<1	1
Cadmium	µg	0.8	0.3	<0.3	0.25
Chromium	µg	1.7	<0.2	0.48	0.2
Cobalt	µg	<0.3	<0.3	<0.3	0.25
Copper	µg	<0.3	0.9	2	0.25
Lead	µg	5.7	2	<2	1.5
Manganese	µg	2.8	1	2.8	0.25
Nickel	µg	3.0	1	7.5	0.5
Phosphorus	µg	38	30	25	2.5
Selenium	µg	<2	<2	<2	1.5
Tellurium	µg	17	9.5	16	2
Thallium	µg	4.5	11	18	1.5
Vanadium	µg	<1	1	<1	1
Zinc	µg	32.6	22	23	0.5
Back Half Metals Fraction 2A					
Aluminum	µg	20	20	25	5
Antimony	µg	<2	<2	<2	2.5
Arsenic	µg	<0.9	<0.9	<0.9	1
Cadmium	µg	<0.2	<0.2	<0.2	0.25
Chromium	µg	1.0	0.98	1.1	0.2
Cobalt	µg	<0.2	0.6	<0.2	0.25
Copper	µg	1	<0.2	3.6	0.25
Lead	µg	2.3	3.8	<1	1.5
Manganese	µg	40.0	2	0.7	0.25
Nickel	µg	<0.4	<0.4	<0.4	0.5
Phosphorus	µg	20	25	10	2.5
Selenium	µg	<1	<1	<1	1.5
Tellurium	µg	7.9	<2	11	2
Thallium	µg	<1	<1	<1	1.5
Vanadium	µg	<0.9	<0.9	<0.9	1
Zinc	µg	5.6	4.6	6.3	0.5
Volume	Sample	mL	659	766	708
Volume	aliquot volume	mL	609	716	658
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	0.05

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Metals and Hg Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883214**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248859
Report Type: Final Report

Reference Number	1883214-1	1883214-2	1883214-3
Sample Date	Mar 05, 2026	Mar 06, 2026	Mar 06, 2026
Sample Time	NA	NA	NA
Sample Location			
Sample Description	Unit 1 Run 1 (MV Unit 1 Run 1 + 4 Bottles) / 20.8 °C	Unit 1 Run 2 (MV Unit 1 Run 2 + 4 Bottles) / 20.8 °C	Unit 1 Run 3 (MV Unit 1 Run 3 + 4 Bottles) / 20.8 °C
Matrix	Stack Samples	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	250	250	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 1B	µg/sample	<0.02	<0.02	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	659	766	
Volume	aliquot volume	mL	5.0	5.0	
Volume	Final	mL	40	40	
Mercury	Fraction 2B	µg/sample	<0.3	<0.3	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	107	96	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3A	µg/sample	<0.009	<0.008	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	500	500	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3B	µg/sample	<0.04	<0.04	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	200	200	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3C	µg/sample	<0.02	<0.02	

Approved by:



Rachel Eden, B. Sc.
Operations Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Metals and Hg Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883214 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248859 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Metals and Hg Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875594 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237340 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Metals and Hg Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875594**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Mar 5, 2026
Report Number: 3237340
Report Type: Final Report

		Reference Number	1875594-1	1875594-2	1875594-3
		Sample Date	Feb 04, 2026	Feb 04, 2026	Feb 04, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit 2 Run 1 ('MET D1' + 4 Bottles) / 20.5 °C	Unit 2 Run 2 ('MV Unit 2 R- 2' + 4 Bottles) / 20.5 °C	Unit 2 Run 3 ('MA 3' + 4 Bottles) / 20.5 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	26	8	8	5
Antimony	µg	3	<2	<2	2.5
Arsenic	µg	5.7	<1	<1	1
Cadmium	µg	<0.3	<0.3	<0.3	0.25
Chromium	µg	2.2	1.7	1.2	0.2
Cobalt	µg	<0.3	<0.3	<0.3	0.25
Copper	µg	2	4.0	4.9	0.25
Lead	µg	<2	<2	<2	1.5
Manganese	µg	1	0.5	0.7	0.25
Nickel	µg	3.8	2	2.8	0.5
Phosphorus	µg	20	20	20	2.5
Selenium	µg	3.8	<2	<2	1.5
Tellurium	µg	<2	8.5	<2	2
Thallium	µg	<2	<2	5.9	1.5
Vanadium	µg	<1	<1	<1	1
Zinc	µg	21	16	15	0.5
Back Half Metals Fraction 2A					
Aluminum	µg	24	31	22	5
Antimony	µg	9	5	9	2.5
Arsenic	µg	<0.9	<0.9	<0.9	1
Cadmium	µg	<0.2	<0.2	<0.2	0.25
Chromium	µg	0.64	<0.2	1.4	0.2
Cobalt	µg	0.9	<0.2	0.9	0.25
Copper	µg	2.7	3.6	2	0.25
Lead	µg	9.1	<1	<1	1.5
Manganese	µg	2.5	0.6	0.8	0.25
Nickel	µg	1	1	0.8	0.5
Phosphorus	µg	22	20	9	2.5
Selenium	µg	16	7.7	12	1.5
Tellurium	µg	<2	<2	3.8	2
Thallium	µg	5.7	6.9	<1	1.5
Vanadium	µg	<0.9	<0.9	<0.9	1
Zinc	µg	22.1	7.2	8.0	0.5
Volume	Sample	mL	726	697	669
Volume	aliquot volume	mL	676	647	619
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	0.33
					0.05

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Metals and Hg Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875594**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Mar 5, 2026
Report Number: 3237340
Report Type: Final Report

		Reference Number	1875594-1	1875594-2	1875594-3
		Sample Date	Feb 04, 2026	Feb 04, 2026	Feb 04, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit 2 Run 1 ('MET D1' + 4 Bottles) / 20.5 °C	Unit 2 Run 2 ('MV Unit 2 R- 2' + 4 Bottles) / 20.5 °C	Unit 2 Run 3 ('MA 3' + 4 Bottles) / 20.5 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	250	250	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 1B	µg/sample	<0.02	<0.02	0.13
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	726	697	669
Volume	aliquot volume	mL	5.0	5.0	5.0
Volume	Final	mL	40	40	40
Mercury	Fraction 2B	µg/sample	<0.3	<0.3	<0.3
Mercury	As Tested	µg/L	<0.05	<0.05	<0.05
Mercury	As Tested	µg/L	<0.05	<0.05	<0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	110	91	93
Volume	aliquot volume	mL	25	25	25
Volume	Final	mL	40	40	40
Mercury	Fraction 3A	µg/sample	<0.009	<0.007	<0.007
Mercury	As Tested	µg/L	<0.05	<0.05	<0.05
Mercury	As Tested	µg/L	<0.05	<0.05	<0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	500	500	500
Volume	aliquot volume	mL	25	25	25
Volume	Final	mL	40	40	40
Mercury	Fraction 3B	µg/sample	<0.04	<0.04	<0.04
Mercury	As Tested	µg/L	<0.05	0.08	0.24
Mercury	As Tested	µg/L	<0.05	0.08	0.24
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL	200	200	200
Volume	aliquot volume	mL	25	25	25
Volume	Final	mL	40	40	40
Mercury	Fraction 3C	µg/sample	<0.02	0.03	0.076

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Metals and Hg Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875594 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237340 Report Type: Final Report
Attn: Missy		
Sampled By:		
Company:		

		Reference Number	1875594-4	1875594-5	1875594-6
		Sample Date	Feb 04, 2026	Feb 05, 2026	Feb 05, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit 3 Run 1 ('MET Z1' + 4 Bottles) / 20.5 °C	Unit 3 Run 2 (Unit 3 Run 2 + 4 Bottles) / 20.5 °C	Unit 3 Run 3 (MF3 + 4 Bottles) / 20.5 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	10	10	9	5
Antimony	µg	<2	4	<2	2.5
Arsenic	µg	4.4	1	<1	1
Cadmium	µg	<0.3	<0.3	<0.3	0.25
Chromium	µg	23.4	1.7	1.7	0.2
Cobalt	µg	<0.3	<0.3	<0.3	0.25
Copper	µg	3.1	2.6	<0.3	0.25
Lead	µg	3.9	<2	<2	1.5
Manganese	µg	2.7	1	0.9	0.25
Nickel	µg	11	2	2	0.5
Phosphorus	µg	20	20	20	2.5
Selenium	µg	<2	2.5	16	1.5
Tellurium	µg	<2	8.1	9.2	2
Thallium	µg	4.0	2	<2	1.5
Vanadium	µg	<1	<1	<1	1
Zinc	µg	5.1	8.4	5.0	0.5
Back Half Metals Fraction 2A					
Aluminum	µg	27	10	10	5
Antimony	µg	9	4	4	2.5
Arsenic	µg	<0.9	2	<0.9	1
Cadmium	µg	<0.2	<0.2	<0.2	0.25
Chromium	µg	2.1	<0.2	0.76	0.2
Cobalt	µg	<0.2	<0.2	<0.2	0.25
Copper	µg	0.9	<0.2	2.2	0.25
Lead	µg	<1	<1	<1	1.5
Manganese	µg	0.4	0.6	0.5	0.25
Nickel	µg	1.0	<0.4	2	0.5
Phosphorus	µg	7	3	20	2.5
Selenium	µg	17	3.9	25.0	1.5
Tellurium	µg	7.6	<2	<2	2
Thallium	µg	14	<1	<1	1.5
Vanadium	µg	<0.9	<0.9	<0.9	1
Zinc	µg	27.1	4.7	6.3	0.5
Volume	Sample	mL	738	785	753
Volume	aliquot volume	mL	688	735	703
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	<0.05

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Metals and Hg Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875594**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Mar 5, 2026
Report Number: 3237340
Report Type: Final Report

		Reference Number	1875594-4	1875594-5	1875594-6
		Sample Date	Feb 04, 2026	Feb 05, 2026	Feb 05, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit 3 Run 1 ('MET Z1' + 4 Bottles) / 20.5 °C	Unit 3 Run 2 (Unit 3 Run 2 + 4 Bottles) / 20.5 °C	Unit 3 Run 3 (MF3 + 4 Bottles) / 20.5 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL 250	250	250	
Volume	aliquot volume	mL 25	25	25	
Volume	Final	mL 40	40	40	
Mercury	Fraction 1B	µg/sample <0.02	<0.02	<0.02	
Mercury	As Tested	µg/L <0.05	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL 738	785	753	
Volume	aliquot volume	mL 5.0	5.0	5.0	
Volume	Final	mL 40	40	40	
Mercury	Fraction 2B	µg/sample <0.3	<0.3	<0.3	
Mercury	As Tested	µg/L <0.05	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL 107	90	92	
Volume	aliquot volume	mL 25	25	25	
Volume	Final	mL 40	40	40	
Mercury	Fraction 3A	µg/sample <0.009	<0.007	<0.007	
Mercury	As Tested	µg/L <0.05	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL 500	500	500	
Volume	aliquot volume	mL 25	25	25	
Volume	Final	mL 40	40	40	
Mercury	Fraction 3B	µg/sample <0.04	<0.04	<0.04	
Mercury	As Tested	µg/L <0.05	0.07	0.08	0.05
Dilution Factor	As Tested	1	1	1	
Volume	Sample	mL 200	200	200	
Volume	aliquot volume	mL 25	25	25	
Volume	Final	mL 40	40	40	
Mercury	Fraction 3C	µg/sample <0.02	0.02	0.02	

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To:	A. Lanfranco & Associates	Project ID:	Metro Vancouver WTE	Lot ID:	1875594
	#101, 9488 - 189 Street	Project Name:	Metals and Hg Samples	Control Number:	
	Surrey, BC, Canada	Project Location:		Date Received:	Feb 11, 2026
	V4N 4W7	LSD:		Date Reported:	Mar 5, 2026
Attn:	Missy	P.O.:		Report Number:	3237340
Sampled By:		Proj. Acct. code:		Report Type:	Final Report
Company:					

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCI/NH3 Samples Project Location: Burnaby, BC LSD: P.O.: Proj. Acct. code:	Lot ID: 1881786 Control Number: Date Received: Mar 12, 2026 Date Reported: Mar 18, 2026 Report Number: 3246650 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: HF/HCl/NH₃ Samples
Project Location: Burnaby, BC
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1881786**
Control Number:
Date Received: Mar 12, 2026
Date Reported: Mar 18, 2026
Report Number: 3246650
Report Type: Final Report

		Reference Number	1881786-1	1881786-2	1881786-3
		Sample Date	Mar 06, 2026	Mar 06, 2026	Mar 06, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	/ Unit 1 HCl/HF/NH ₃ Run 1 / 21.8 °C	/ Unit 1 HCl/HF/NH ₃ Run 2 / 21.8 °C	/ Unit 1 HCl/HF/NH ₃ Run 3 / 21.8 °C
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Air Quality					
Volume	Sample	mL	169	187	167
Dilution Factor	chloride		10.00	10.00	10.00
Chloride	As Tested	mg/L	1.2	15.5	0.5
Chloride	Water Soluble	µg/sample	210	2890	80
Dilution Factor	fluoride		10.00	10.00	10.00
Fluoride	As Tested	mg/L	<0.3	0.6	<0.3
Fluoride	Water Soluble	µg/sample	<50	100	<50
Ammonium - N	As Tested	µg/L	196	6330	270
Dilution Factor	As Tested		1.00	1.00	1.00
Sample Volume	Sample volume	mL	128	136	120
Ammonium - N		µg/sample	25.1	861	32.4

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To:	A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID:	Metro Vancouver WTE	Lot ID:	1881786
Attn:	Missy	Project Name:	HF/HCl/NH3 Samples	Control Number:	
Sampled By:		Project Location:	Burnaby, BC	Date Received:	Mar 12, 2026
Company:		LSD:		Date Reported:	Mar 18, 2026
		P.O.:		Report Number:	3246650
		Proj. Acct. code:		Report Type:	Final Report

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Ammonium in Impingers	APHA	* Automated Phenate Method, 4500-NH3 G	Mar 17, 2026	Element Edmonton - Roper Road
Anions by IEC in air (VAN)	EMC	* Determination of Hydrogen Halide & Halogen Emissions from Stationary Sources (Isokinetic), 26A	Mar 12, 2026	Element Vancouver
* Reference Method Modified				

References

APHA	Standard Methods for the Examination of Water and Wastewater
EMC	Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCI Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875810 Control Number: Date Received: Feb 11, 2026 Date Reported: Feb 19, 2026 Report Number: 3237689 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com

Delivery	Format	Deliverables
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice

Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
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Delivery	Format	Deliverables
Email	PDF	Invoice

Notes To Clients:

- Reduction of analytical volume was necessary for anion analysis due to matrix effects in lot 1875810. Detection limits are adjusted accordingly.

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: HF/HCI Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875810**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Feb 19, 2026
Report Number: 3237689
Report Type: Final Report

		Reference Number	1875810-1	1875810-2	1875810-3	
		Sample Date	Feb 04, 2026	Feb 04, 2026	Feb 04, 2026	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	Unit # 2 Gas Run 1	Unit # 2 Gas Run 2	Unit # 2 Gas Run 3	
		Matrix	Stack Samples	Stack Samples	Stack Samples	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Air Quality						
Volume	Sample	mL	185	207	228	
Dilution Factor	chloride		10.00	10.00	10.00	
Chloride	As Tested	mg/L	9.8	20.8	33.0	0.05
Chloride	Water Soluble	µg/sample	1800	4310	7530	
Dilution Factor	fluoride		10.00	10.00	10.00	
Fluoride	As Tested	mg/L	<0.3	<0.3	<0.3	0.03
Fluoride	Water Soluble	µg/sample	<60	<60	<70	
Ammonium - N	As Tested	µg/L	965	2390	6020	25
Dilution Factor	As Tested		1.00	1.00	1.00	
Sample Volume	Sample volume	mL	138	162	170	
Ammonium - N		µg/sample	133	387	1020	

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: HF/HCI Samples
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875810**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Feb 19, 2026
Report Number: 3237689
Report Type: Final Report

		Reference Number	1875810-4	1875810-5	1875810-6
		Sample Date	Feb 05, 2026	Feb 05, 2026	Feb 05, 2026
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	Unit # 3 Gas Run 1	Unit # 3 Gas Run 2	Unit # 3 Gas Run 3
		Matrix	Stack Samples	Stack Samples	Stack Samples
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Air Quality					
Volume	Sample	mL	234	227	234
Dilution Factor	chloride		10.00	10.00	10.00
Chloride	As Tested	mg/L	10.5	25.5	10.6
Chloride	Water Soluble	µg/sample	2460	5790	2490
Dilution Factor	fluoride		10.00	10.00	10.00
Fluoride	As Tested	mg/L	<0.3	<0.3	<0.3
Fluoride	Water Soluble	µg/sample	<70	<70	<70
Ammonium - N	As Tested	µg/L	9620	1850	3630
Dilution Factor	As Tested		1.00	1.00	1.00
Sample Volume	Sample volume	mL	185	180	192
Ammonium - N		µg/sample	1780	332	697

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCl Samples Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875810 Control Number: Date Received: Feb 11, 2026 Date Reported: Feb 19, 2026 Report Number: 3237689 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Ammonium in Impingers	APHA	* Automated Phenate Method, 4500-NH ₃ G	Feb 18, 2026	Element Edmonton - Roper Road
Anions by IEC in air (VAN)	EMC	* Determination of Hydrogen Halide & Halogen Emissions from Stationary Sources (Isokinetic), 26A <i>* Reference Method Modified</i>	Feb 12, 2026	Element Vancouver

References

APHA	Standard Methods for the Examination of Water and Wastewater
EMC	Emission Measurement Center of EPA

Comments:

- Reduction of analytical volume was necessary for anion analysis due to matrix effects in lot 1875810. Detection limits are adjusted accordingly.

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.



LABORATORY REPORT

March 26, 2026

Mark Lanfranco
A. Lanfranco and Associates Inc.
Unit 101 - 9488 189 St.
Surrey, BC V4N 4W7

RE: Metro Vancouver WTE

Dear Mark:

Enclosed are the results of the samples submitted to our laboratory on March 12, 2026. For your reference, these analyses have been assigned our service request number P2601017.

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

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

ALS | Environmental

By Sue Anderson at 4:41 pm, Mar 26, 2026

Sue Anderson
Project Manager



Client: A. Lanfranco and Associates Inc.
Project: Metro Vancouver WTE

Service Request No: P2601017

CASE NARRATIVE

The samples were received intact under chain of custody on March 12, 2026 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

C3 through C6 Hydrocarbons, Methane, Ethene and Ethane Analysis

The samples were analyzed by modified EPA Method TO-3 for C3 through >C6 hydrocarbons and methane, ethene and ethane using a gas chromatograph equipped with a flame ionization detector (FID). This procedure is described in laboratory SOP VOA-TO3C1C6. This method is included on the laboratory's DoD-ELAP scope of accreditation; however, it is not part of the NELAP or AIHA-LAP, LLC accreditation.

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

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



CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	https://dec.alaska.gov/spar/csp/lab-approval/list-of-approved-labs	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	https://internet.deq.louisiana.gov/portal/divisions/lalap/accredited-laboratories	203013
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtm	CA012627
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	006-999-456
New Jersey DEP (NELAP)	https://dep.nj.gov/dsr/oqa/certified-laboratories/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oklahoma DEQ (NELAP)	labaccreditation.deq.ok.gov/labaccreditation/	2207
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration only)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413
Utah DOH (NELAP)	https://uphl.utah.gov/certifications/environmental-laboratory-certification/	CA01627
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

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

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

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: A. Lanfranco and Associates Inc.
Project ID: Metro Vancouver WTE

Service Request: P2601017

Date Received: 3/12/2026
Time Received: 09:33

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - C1C6+ Can	TO-3 Modified - MEEPP Can
MV WTE UNIT 1 RUN #1	P2601017-001	Air	3/6/2026	10:40	SC02336	-4.45	3.92	X	X
MV WTE UNIT 1 RUN #2	P2601017-002	Air	3/6/2026	11:53	SC01766	-5.86	4.08	X	X
MV WTE UNIT 1 RUN #3	P2601017-003	Air	3/6/2026	13:03	SC01785	-1.29	3.75	X	X

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

ALS Simi Valley, California 93065 Phone (805) 526-7161 Fax (805) 526-7270									Requested Turnaround Time in Business Days (Surcharges) please circle 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard			ALS Project No. P2601017	
Company Name & Address (Reporting Information) A. Lanfranco & Associates Inc. Unit 101 9488 189 Street, Surrey, BC, V4N 4W7									ALS Contact:		Comments e.g. Actual Preservative or specific instructions		
									Analysis Method				
									TO-15 (list on file)				
Project Manager Mark Lanfranco									P.O. # / Billing Information Bill to Account				
Phone 604 881 2582 Fax _____													
Email Address for Result Reporting mark.lanfranco@alanfranco.com													
Sampler (Print & Sign) Liam Ferrer													
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure *Hg	Canister End Pressure *Hg/psig	Sample Volume					
MV WTE UNIT 1 RUN #1		6-Mar	09:40 - 10:40	SC02336	0A00970	-29	-10	6L	X				
MV WTE UNIT 1 RUN #2		6-Mar	10:53 - 11:53	SC01766	0A00878	-28	-8	6L	X				
MV WTE UNIT 1 RUN #3		6-Mar	12:03 - 13:03	SC01785	0A02323	-27	-5	6L	X				
Report Tier Levels - please select Tier I - Results (Default if not specified) _____ Tier III (Results + QC & Calibration Summaries) _____ Tier II (Results + QC Summaries) _____ Tier IV (Data Validation Package) 10% Surcharge _____										Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT			
Relinquished by: (Signature) Mark Lanfranco				Date: March 9, 2016		Time: 10:00		Received by: (Signature) [Signature]		Date: 3/12/2016		Time: 09:33	
Relinquished by: (Signature) [Signature]				Date: 3/12/2016		Time: 09:33		Received by: (Signature) [Signature]		Date: 3/12/2016		Time: 09:33	
Project Requirements (MRLs, QAPP)										Cooler / Blank Temperature _____ °C			

ALS Environmental **Sample Acceptance Check Form**

Client: A. Lanfranco and Associates Inc. Work order: P2601017
 Project: Metro Vancouver WTE
 Sample(s) received on: 3/12/2026 Date opened: 3/12/2026 by: DIANA.AYALA

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

- | | <u>Yes</u> | <u>No</u> | <u>N/A</u> |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☒ | |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |
| 12 Lab Notification: Analyst and PM were alerted of Short HT or RUSH samples? | ☐ | ☐ | ☒ |
| 13 Client Notification: Client has been notified regarding HT exceedances and/or other CoC discrepancies? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2601017-001.01	6.0 L Source Can					
P2601017-002.01	6.0 L Source Can					
P2601017-003.01	6.0 L Source Can					

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

Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-001

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC02336

Date Collected: 3/6/26

Date Received: 3/12/26

Date Analyzed: 3/19/26

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -4.45

Final Pressure (psig): 3.92

Container Dilution Factor: 1.82

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.8	
C ₄ as n-Butane	ND	1.8	
C ₅ as n-Pentane	ND	1.8	
C ₆ as n-Hexane	ND	11	
C ₆ + as n-Hexane	ND	1.8	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-002

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01766

Date Collected: 3/6/26

Date Received: 3/12/26

Date Analyzed: 3/19/26

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -5.86 Final Pressure (psig): 4.08

Container Dilution Factor: 2.12

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	2.1	
C ₄ as n-Butane	ND	2.1	
C ₅ as n-Pentane	ND	2.1	
C ₆ as n-Hexane	ND	13	
C ₆ + as n-Hexane	ND	2.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #3

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-003

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01785

Date Collected: 3/6/26

Date Received: 3/12/26

Date Analyzed: 3/19/26

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.29

Final Pressure (psig): 3.75

Container Dilution Factor: 1.38

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.4	
C ₄ as n-Butane	ND	1.4	
C ₅ as n-Pentane	ND	1.4	
C ₆ as n-Hexane	ND	8.3	
C ₆ + as n-Hexane	ND	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Method Blank

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P260319-MB

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/19/26

Volume(s) Analyzed: 1.0 ml(s)

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.0	
C ₄ as n-Butane	ND	1.0	
C ₅ as n-Pentane	ND	1.0	
C ₆ as n-Hexane	ND	6.0	
C ₆ + as n-Hexane	ND	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Duplicate Lab Control Sample

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P260319-DLCS

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/19/26

Volume(s) Analyzed: NA ml(s)

Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
	LCS / DLCS ppmV	LCS ppmV	DLCS ppmV	LCS	DLCS	Acceptance Limits			
Propane	1,000	1,120	1,120	112	112	92-120	0	6	
n-Butane	1,000	1,130	1,130	113	113	91-121	0	6	
n-Pentane	1,000	1,110	1,100	111	110	89-118	0.9	6	
n-Hexane	1,000	1,180	1,170	118	117	92-125	0.9	6	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-001

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC02336

Date Collected: 3/6/2026

Date Received: #####

Date Analyzed: 3/24/26

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -4.45 **Final Pressure (psig):** 3.92

Container Dilution Factor: 1.82

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	2.4	ND	3.6	
74-85-1	Ethene	ND	1.3	ND	1.1	
74-84-0	Ethane	ND	1.3	ND	1.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-002

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01766

Date Collected: 3/6/2026

Date Received: #####

Date Analyzed: 3/24/26

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -5.86 **Final Pressure (psig):** 4.08

Container Dilution Factor: 2.12

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	2.8	ND	4.2	
74-85-1	Ethene	ND	1.5	ND	1.3	
74-84-0	Ethane	ND	1.6	ND	1.3	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 1 RUN #3

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P2601017-003

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01785

Date Collected: 3/6/2026

Date Received: #####

Date Analyzed: 3/24/26

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -1.29 **Final Pressure (psig):** 3.75

Container Dilution Factor: 1.38

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	1.8	ND	2.8	
74-85-1	Ethene	ND	0.95	ND	0.83	
74-84-0	Ethane	ND	1.0	ND	0.83	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Method Blank

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P260324-MB

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/24/26

Volume(s) Analyzed: 0.50 ml(s)

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	1.3	ND	2.0	
74-85-1	Ethene	ND	0.69	ND	0.60	
74-84-0	Ethane	ND	0.74	ND	0.60	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Duplicate Lab Control Sample

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2601017

ALS Sample ID: P260324-DLCS

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/24/26

Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS ppmV	LCS ppmV	DLCS ppmV	LCS	DLCS	Acceptance Limits			
74-82-8	Methane	7.79	7.16	6.93	92	89	70-130	3	15	
74-85-1	Ethene	7.74	7.03	6.78	91	88	70-130	3	15	
74-84-0	Ethane	7.68	7.19	6.86	94	89	70-130	5	15	



LABORATORY REPORT

February 24, 2026

Mark Lanfranco
A. Lanfranco and Associates Inc.
Unit 101 - 9488 189 St.
Surrey, BC V4N 4W7

RE: Metro Vancouver WTE

Dear Mark:

Enclosed are the results of the samples submitted to our laboratory on February 11, 2026. For your reference, these analyses have been assigned our service request number P2600553.

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

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

ALS | Environmental

By Sue Anderson at 3:35 pm, Feb 24, 2026

Sue Anderson
Project Manager



Client: A. Lanfranco and Associates Inc.
Project: Metro Vancouver WTE

Service Request No: P2600553

CASE NARRATIVE

The samples were received intact under chain of custody on February 11, 2026 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

C3 through C6 Hydrocarbons, Methane, Ethene and Ethane Analysis

The samples were analyzed by modified EPA Method TO-3 for C3 through >C6 hydrocarbons and methane, ethene and ethane using a gas chromatograph equipped with a flame ionization detector (FID). This procedure is described in laboratory SOP VOA-TO3C1C6. This method is included on the laboratory's DoD-ELAP scope of accreditation; however, it is not part of the NELAP or AIHA-LAP, LLC accreditation.

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

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



CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	https://dec.alaska.gov/spar/csp/lab-approval/list-of-approved-labs	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	https://internet.deq.louisiana.gov/portal/divisions/lelap/accredited-laboratories	203013
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtm	CA012627
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	006-999-456
New Jersey DEP (NELAP)	https://dep.nj.gov/dsr/oqa/certified-laboratories/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oklahoma DEQ (NELAP)	labaccreditation.deq.ok.gov/labaccreditation/	2207
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration only)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413
Utah DOH (NELAP)	https://uphl.utah.gov/certifications/environmental-laboratory-certification/	CA01627
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

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

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

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: A. Lanfranco and Associates Inc.
Project ID: Metro Vancouver WTE

Service Request: P2600553

Date Received: 2/11/2026
Time Received: 09:16

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-3 Modified - C1C6+ Can	TO-3 Modified - MEEPP Can
MV WTE UNIT 2 RUN #1	P2600553-001	Air	2/4/2026	10:00	SC01486	-4.06	4.34	X	X
MV WTE UNIT 2 RUN #2	P2600553-002	Air	2/4/2026	11:15	SC01545	-9.29	4.21	X	X
MV WTE UNIT 2 RUN #3	P2600553-003	Air	2/4/2026	12:20	SC02285	-1.96	4.23	X	X
MV WTE UNIT 3 RUN #1	P2600553-004	Air	2/5/2026	10:45	SC00778	-2.86	4.13	X	X
MV WTE UNIT 3 RUN #2	P2600553-005	Air	2/5/2026	11:55	SC00369	-4.71	4.20	X	X
MV WTE UNIT 3 RUN #3	P2600553-006	Air	2/5/2026	13:05	SC01652	-5.30	4.60	X	X



Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

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

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

ALS Project No. **72600553**

Company Name & Address (Reporting Information) A. Lanfranco & Associates Inc. Unit 101 9488 189 Street, Surrey, BC, V4N 4W7				Project Name Metro Vancouver WTE					ALS Contact:		Comments e.g. Actual Preservative or specific instructions
Project Manager Mark Lanfranco				Project Number					Analysis Method		
Phone 604 881 2582				Fax					TO-15 (list on file)		
Email Address for Result Reporting mark.lanfranco@alanfranco.com				P.O. # / Billing Information Bill to Account							
				Sampler (Print & Sign) Liam Forrer							
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure *Hg	Canister End Pressure *Hg/psig	Sample Volume			
MV WTE UNIT 2 RUN #1	1	4-Feb	10:00	SC01486	0A01175	-28	-10	6L	X		
MV WTE UNIT 2 RUN #2	2	4-Feb	11:15	SC01595	0A01175	-27.5	-18	6L	X		
MV WTE UNIT 2 RUN #3	3	4-Feb	12:20	SC02285	0A01175	-27	-5	6L	X		
MV WTE UNIT 3 RUN #1	4	5-Feb	10:45	SC00778	0A00014	-30	-5	6L	X		
MV WTE UNIT 3 RUN #2	5	5-Feb	11:55	SC00369	0A00014	-29	-10	6L	X		
MV WTE UNIT 3 RUN #3	6	5-Feb	13:05	SC01652	0A00014	-30	-12	6L	X		
Report Tier Levels - please select											
Tier I - Results (Default if not specified) _____			Tier III (Results + QC & Calibration Summaries) _____			EDD required Yes / No			Chain of Custody Seal: (Circle)		
Tier II (Results + QC Summaries) _____			Tier IV (Data Validation Package) 10% Surcharge _____			Type: _____ Units: _____			INTACT BROKEN ABSENT		
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature)			Date:	Time:	Project Requirements (MRLs, QAPP)	
Relinquished by: (Signature) [Signature]			Date:	Time:	Received by: (Signature) [Signature]			Date:	Time:	Cooler / Blank Temperature ____°C	

ALS Environmental **Sample Acceptance Check Form**

Client: A. Lanfranco and Associates Inc. Work order: P2600553
 Project: Metro Vancouver WTE
 Sample(s) received on: 2/11/2026 Date opened: 2/11/2026 by: ADAVID

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

- | | Yes | No | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☒ | |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |
| 12 Lab Notification: Analyst and PM were alerted of Short HT or RUSH samples? | ☐ | ☐ | ☒ |
| 13 Client Notification: Client has been notified regarding HT exceedances and/or other CoC discrepancies? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2600553-001.01	6.0 L Source Can					
P2600553-002.01	6.0 L Source Can					
P2600553-003.01	6.0 L Source Can					
P2600553-004.01	6.0 L Source Can					
P2600553-005.01	6.0 L Source Can					
P2600553-006.01	6.0 L Source Can					
P2600553-007.01	6.0 L Source Can					
P2600553-008.01	6.0 L Source Can					
P2600553-009.01	6.0 L Silonite Can					

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

Can id for sample -002 is listed SC01595 on the COC but the correct can id is SC01545.

Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-001

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01486

Date Collected: 2/4/26

Date Received: 2/11/26

Date Analyzed: 1/0/00

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -4.06 **Final Pressure (psig):** 4.34

Container Dilution Factor: 1.79

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.8	
C ₄ as n-Butane	ND	1.8	
C ₅ as n-Pentane	ND	1.8	
C ₆ as n-Hexane	ND	11	
C ₆ + as n-Hexane	ND	1.8	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-002

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01545

Date Collected: 2/4/26

Date Received: 2/11/26

Date Analyzed: 1/0/00

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -9.29

Final Pressure (psig): 4.21

Container Dilution Factor: 3.50

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	3.5	
C ₄ as n-Butane	ND	3.5	
C ₅ as n-Pentane	ND	3.5	
C ₆ as n-Hexane	ND	21	
C ₆ + as n-Hexane	ND	3.5	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #3

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-003

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC02285

Date Collected: 2/4/26

Date Received: 2/11/26

Date Analyzed: 1/0/00

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -1.96

Final Pressure (psig): 4.23

Container Dilution Factor: 1.49

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.5	
C ₄ as n-Butane	ND	1.5	
C ₅ as n-Pentane	ND	1.5	
C ₆ as n-Hexane	ND	8.9	
C ₆ + as n-Hexane	ND	1.5	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 3 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-004

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC00778

Date Collected: 2/5/26

Date Received: 2/11/26

Date Analyzed: 1/0/00

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -2.86 **Final Pressure (psig):** 4.13

Container Dilution Factor: 1.59

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.6	
C ₄ as n-Butane	ND	1.6	
C ₅ as n-Pentane	ND	1.6	
C ₆ as n-Hexane	ND	9.5	
C ₆ + as n-Hexane	ND	1.6	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 3 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-005

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC00369

Date Collected: 2/5/26

Date Received: 2/11/26

Date Analyzed: 1/0/00

Volume(s) Analyzed: 1.0 ml(s)

Initial Pressure (psig): -4.71 **Final Pressure (psig):** 4.20

Container Dilution Factor: 1.89

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.9	
C ₄ as n-Butane	ND	1.9	
C ₅ as n-Pentane	ND	1.9	
C ₆ as n-Hexane	ND	11	
C ₆ + as n-Hexane	ND	1.9	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Method Blank

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P260219-MB

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/19/26

Volume(s) Analyzed: 1.0 ml(s)

Compound	Result ppmV	MRL ppmV	Data Qualifier
C ₃ as Propane	ND	1.0	
C ₄ as n-Butane	ND	1.0	
C ₅ as n-Pentane	ND	1.0	
C ₆ as n-Hexane	ND	6.0	
C ₆ + as n-Hexane	ND	1.0	

U = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Duplicate Lab Control Sample

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P260219-DLCS

Test Code: EPA TO-3 Modified

Instrument ID: HP5890 II/GC8/FID

Analyst: Stephanie Reynoso

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/19/26

Volume(s) Analyzed: NA ml(s)

Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
	LCS / DLCS ppmV	LCS ppmV	DLCS ppmV	LCS	DLCS	Acceptance Limits			
Propane	1,000	1,120	1,110	112	111	92-120	0.9	6	
n-Butane	1,000	1,120	1,110	112	111	91-121	0.9	6	
n-Pentane	1,000	1,080	1,070	108	107	89-118	0.9	6	
n-Hexane	1,000	1,110	1,090	111	109	92-125	2	6	

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-001

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01486

Date Collected: 2/4/2026

Date Received: 2/11/2026

Date Analyzed: 2/16/2026

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -4.06 Final Pressure (psig): 4.34

Container Dilution Factor: 1.79

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	3.2	2.3	4.9	3.6	
74-85-1	Ethene	ND	1.2	ND	1.1	
74-84-0	Ethane	ND	1.3	ND	1.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-002

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01545

Date Collected: 2/4/2026

Date Received: 2/11/2026

Date Analyzed: 2/16/2026

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -9.29 **Final Pressure (psig):** 4.21

Container Dilution Factor: 3.50

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	4.6	ND	7.0	
74-85-1	Ethene	ND	2.4	ND	2.1	
74-84-0	Ethane	ND	2.6	ND	2.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 2 RUN #3

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-003

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC02285

Date Collected: 2/4/2026

Date Received: 2/11/2026

Date Analyzed: 2/16/2026

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -1.96 Final Pressure (psig): 4.23

Container Dilution Factor: 1.49

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	3.1	2.0	4.8	3.0	
74-85-1	Ethene	ND	1.0	ND	0.89	
74-84-0	Ethane	ND	1.1	ND	0.89	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 3 RUN #1

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-004

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC00778

Date Collected: 2/5/2026

Date Received: 2/11/2026

Date Analyzed: 2/16/2026

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -2.86 **Final Pressure (psig):** 4.13

Container Dilution Factor: 1.59

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	2.1	ND	3.2	
74-85-1	Ethene	ND	1.1	ND	0.95	
74-84-0	Ethane	ND	1.2	ND	0.95	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 3 RUN #2

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-005

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC00369

Date Collected: 2/5/2026

Date Received: 2/11/2026

Date Analyzed: 2/16/2026

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -4.71 Final Pressure (psig): 4.20

Container Dilution Factor: 1.89

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	3.2	2.5	4.8	3.8	
74-85-1	Ethene	ND	1.3	ND	1.1	
74-84-0	Ethane	ND	1.4	ND	1.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: MV WTE UNIT 3 RUN #3

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P2600553-006

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Container ID: SC01652

Date Collected: 2/5/2026

Date Received: #####

Date Analyzed: #####

Volume(s) Analyzed: 0.50 ml(s)

Initial Pressure (psig): -5.30 **Final Pressure (psig):** 4.60

Container Dilution Factor: 2.05

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	3.6	2.7	5.4	4.1	
74-85-1	Ethene	ND	1.4	ND	1.2	
74-84-0	Ethane	ND	1.5	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Method Blank

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P260216-MB

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/16/26

Volume(s) Analyzed: 0.50 ml(s)

CAS #	Compound	Result mg/m ³	MRL mg/m ³	Result ppmV	MRL ppmV	Data Qualifier
74-82-8	Methane	ND	1.3	ND	2.0	
74-85-1	Ethene	ND	0.69	ND	0.60	
74-84-0	Ethane	ND	0.74	ND	0.60	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: A. Lanfranco and Associates Inc.

Client Sample ID: Duplicate Lab Control Sample

Client Project ID: Metro Vancouver WTE

ALS Project ID: P2600553

ALS Sample ID: P260216-DLCS

Test Code: EPA TO-3 Modified

Instrument ID: HP5890A/GC10/FID/TCD

Analyst: Gilbert Gutierrez

Sampling Media: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 2/16/26

Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS	LCS	DLCS	LCS	DLCS	Acceptance			
		ppmV	ppmV	ppmV			Limits		Limit	Qualifier
74-82-8	Methane	7.79	7.47	7.97	96	102	70-130	6	15	
74-85-1	Ethene	7.74	7.44	7.56	96	98	70-130	2	15	
74-84-0	Ethane	7.68	7.76	7.87	101	102	70-130	1.0	15	

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCI/NH3 Blanks Project Location: Burnaby, BC LSD: P.O.: Proj. Acct. code:	Lot ID: 1881785 Control Number: Date Received: Mar 12, 2026 Date Reported: Mar 18, 2026 Report Number: 3246649 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCl/NH3 Blanks Project Location: Burnaby, BC LSD: P.O.: Proj. Acct. code:	Lot ID: 1881785 Control Number: Date Received: Mar 12, 2026 Date Reported: Mar 18, 2026 Report Number: 3246649 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Reference Number 1881785-1
Sample Date Mar 06, 2026
Sample Time NA
Sample Location
Sample Description / Unit 1 Blank
HCl/HF/NH3 / 21.8
°C

Matrix Stack Samples

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Air Quality						
Volume	Sample	mL	191			
Dilution Factor	chloride		10.00			
Chloride	As Tested	mg/L	<0.5			0.05
Chloride	Water Soluble	µg/sample	<100			
Dilution Factor	fluoride		10.00			
Fluoride	As Tested	mg/L	<0.3			0.03
Fluoride	Water Soluble	µg/sample	<60			
Ammonium - N	As Tested	µg/L	470			25
Dilution Factor	As Tested		1.00			
Sample Volume	Sample volume	mL	144			
Ammonium - N		µg/sample	67.7			

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To:	A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID:	Metro Vancouver WTE	Lot ID:	1881785
Attn:	Missy	Project Name:	HF/HCl/NH3 Blanks	Control Number:	
Sampled By:		Project Location:	Burnaby, BC	Date Received:	Mar 12, 2026
Company:		LSD:		Date Reported:	Mar 18, 2026
		P.O.:		Report Number:	3246649
		Proj. Acct. code:		Report Type:	Final Report

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Ammonium in Impingers	APHA	* Automated Phenate Method, 4500-NH3 G	Mar 17, 2026	Element Edmonton - Roper Road
Anions by IEC in air (VAN)	EMC	* Determination of Hydrogen Halide & Halogen Emissions from Stationary Sources (Isokinetic), 26A	Mar 12, 2026	Element Vancouver
* Reference Method Modified				

References

APHA	Standard Methods for the Examination of Water and Wastewater
EMC	Emission Measurement Center of EPA

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCI Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875814 Control Number: Date Received: Feb 11, 2026 Date Reported: Feb 19, 2026 Report Number: 3237695 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Notes To Clients:

- Reduction of analytical volume was necessary for anion analysis due to matrix effects in lot 1875814. Detection limits are adjusted accordingly.

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCl Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875814 Control Number: Date Received: Feb 11, 2026 Date Reported: Feb 19, 2026 Report Number: 3237695 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Reference Number	1875814-1	1875814-2
Sample Date	Feb 04, 2026	Feb 05, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Unit #2 Gas Blank / 19.6 °C	Unit #3 Gas Blank / 19.6 °C
Matrix	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Air Quality					
Volume	Sample	mL	135	152	
Dilution Factor	chloride		10.00	10.00	
Chloride	As Tested	mg/L	<0.5	<0.5	0.05
Chloride	Water Soluble	µg/sample	<70	<80	
Dilution Factor	fluoride		10.00	10.00	
Fluoride	As Tested	mg/L	<0.3	<0.3	0.03
Fluoride	Water Soluble	µg/sample	<40	<50	
Ammonium - N	As Tested	µg/L	<25	<25	25
Dilution Factor	As Tested		1.00	1.00	
Sample Volume	Sample volume	mL	92.0	110	
Ammonium - N		µg/sample	<2.3	<2.8	

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: HF/HCl Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875814 Control Number: Date Received: Feb 11, 2026 Date Reported: Feb 19, 2026 Report Number: 3237695 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Ammonium in Impingers	APHA	* Automated Phenate Method, 4500-NH ₃ G	Feb 18, 2026	Element Edmonton - Roper Road
Anions by IEC in air (VAN)	EMC	* Determination of Hydrogen Halide & Halogen Emissions from Stationary Sources (Isokinetic), 26A <i>* Reference Method Modified</i>	Feb 12, 2026	Element Vancouver

References

APHA	Standard Methods for the Examination of Water and Wastewater
EMC	Emission Measurement Center of EPA

Comments:

- Reduction of analytical volume was necessary for anion analysis due to matrix effects in lot 1875814. Detection limits are adjusted accordingly.

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Field Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883228 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248875 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Field Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883228**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248875
Report Type: Final Report

Reference Number 1883228-1
Sample Date Mar 06, 2026
Sample Time NA
Sample Location
Sample Description Field Blank Unit 1
(MV Unit 1 BLK + 4
Bottles) / 20.8 °C
Matrix Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	<5			5
Antimony	µg	<2			2.5
Arsenic	µg	2			1
Cadmium	µg	<0.3			0.25
Chromium	µg	<0.2			0.2
Cobalt	µg	<0.3			0.25
Copper	µg	<0.3			0.25
Lead	µg	9.3			1.5
Manganese	µg	<0.3			0.25
Nickel	µg	<0.5			0.5
Phosphorus	µg	20			2.5
Selenium	µg	7.0			1.5
Tellurium	µg	3.7			2
Thallium	µg	13			1.5
Vanadium	µg	<1			1
Zinc	µg	4.5			0.5
Back Half Metals Fraction 2A					
Aluminum	µg	5			5
Antimony	µg	<2			2.5
Arsenic	µg	<0.9			1
Cadmium	µg	<0.2			0.25
Chromium	µg	0.54			0.2
Cobalt	µg	<0.2			0.25
Copper	µg	2			0.25
Lead	µg	2			1.5
Manganese	µg	<0.2			0.25
Nickel	µg	<0.5			0.5
Phosphorus	µg	10			2.5
Selenium	µg	<1			1.5
Tellurium	µg	9.6			2
Thallium	µg	16			1.5
Vanadium	µg	<0.9			1
Zinc	µg	0.7			0.5
Volume	Sample	mL	364		
Volume	aliquot volume	mL	314		
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05		0.05

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Field Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883228**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248875
Report Type: Final Report

Reference Number 1883228-1
Sample Date Mar 06, 2026
Sample Time NA
Sample Location
Sample Description Field Blank Unit 1
(MV Unit 1 BLK + 4
Bottles) / 20.8 °C
Matrix Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Dilution Factor	As Tested	1			
Volume	Sample	mL	250		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 1B	µg/sample	<0.02		
Mercury	As Tested	µg/L	0.06		0.05
Dilution Factor	As Tested	1			
Volume	Sample	mL	364		
Volume	aliquot volume	mL	5.0		
Volume	Final	mL	40		
Mercury	Fraction 2B	µg/sample	0.2		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested	1			
Volume	Sample	mL	100		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3A	µg/sample	<0.008		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested	1			
Volume	Sample	mL	500		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3B	µg/sample	<0.04		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested	1			
Volume	Sample	mL	200		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3C	µg/sample	<0.02		

Approved by:



Rachel Eden, B. Sc.
Operations Manager

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Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Field Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883228 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248875 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Field Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875697 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237467 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Field Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875697 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237467 Report Type: Final Report
Attn: Missy		
Sampled By:		
Company:		

Reference Number	1875697-1	1875697-2
Sample Date	Feb 04, 2026	Feb 05, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Field Blank Unit 2 (MD BLK + 4 Bottles) / 20.6 °C	Field Blank Unit 3 (ME Blank + 4 Bottles) / 20.6 °C
Matrix	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	<5	<5		5
Antimony	µg	<2	<2		2.5
Arsenic	µg	<1	<1		1
Cadmium	µg	<0.3	<0.3		0.25
Chromium	µg	0.2	1.0		0.2
Cobalt	µg	<0.3	<0.3		0.25
Copper	µg	0.9	0.5		0.25
Lead	µg	<2	<2		1.5
Manganese	µg	<0.3	<0.3		0.25
Nickel	µg	0.7	<0.5		0.5
Phosphorus	µg	20	20		2.5
Selenium	µg	<2	13		1.5
Tellurium	µg	11	3.9		2
Thallium	µg	<2	11		1.5
Vanadium	µg	<1	<1		1
Zinc	µg	8.2	3.6		0.5
Back Half Metals Fraction 2A					
Aluminum	µg	<5	<5		5
Antimony	µg	4	<2		2.5
Arsenic	µg	<0.9	<0.9		1
Cadmium	µg	<0.2	<0.2		0.25
Chromium	µg	<0.2	<0.2		0.2
Cobalt	µg	0.8	0.9		0.25
Copper	µg	3.1	3.1		0.25
Lead	µg	<1	<1		1.5
Manganese	µg	0.3	0.3		0.25
Nickel	µg	0.7	<0.5		0.5
Phosphorus	µg	20	8		2.5
Selenium	µg	<1	28.1		1.5
Tellurium	µg	7.8	<2		2
Thallium	µg	<1	<1		1.5
Vanadium	µg	<0.9	<0.9		1
Zinc	µg	1	5.8		0.5
Volume	Sample	mL	373	362	
Volume	aliquot volume	mL	323	312	
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	0.05

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Field Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1875697**
Control Number:
Date Received: Feb 11, 2026
Date Reported: Mar 5, 2026
Report Number: 3237467
Report Type: Final Report

Reference Number	1875697-1	1875697-2
Sample Date	Feb 04, 2026	Feb 05, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Field Blank Unit 2 (MD BLK + 4 Bottles) / 20.6 °C	Field Blank Unit 3 (ME Blank + 4 Bottles) / 20.6 °C
Matrix	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Dilution Factor	As Tested	1	1		
Volume	Sample	mL	250	250	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 1B	µg/sample	<0.02	<0.02	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1		
Volume	Sample	mL	373	362	
Volume	aliquot volume	mL	5.0	5.0	
Volume	Final	mL	40	40	
Mercury	Fraction 2B	µg/sample	<0.1	<0.1	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1		
Volume	Sample	mL	90	91	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3A	µg/sample	<0.007	<0.007	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1		
Volume	Sample	mL	500	500	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3B	µg/sample	<0.04	<0.04	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested	1	1		
Volume	Sample	mL	200	200	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3C	µg/sample	<0.02	<0.02	

Approved by:



Reena Sharma
Operations Chemist

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Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Field Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875697 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237467 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Filter Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883232 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248892 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
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Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Filter Reagent Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883232**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248892
Report Type: Final Report

Reference Number 1883232-1
Sample Date Mar 05, 2026
Sample Time NA
Sample Location
Sample Description Reagent Blank Unit 1
Container 1 (filter) /
20.8 °C

Matrix Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	<5			5
Antimony	µg	<2			2.5
Arsenic	µg	3.0			1
Cadmium	µg	<0.3			0.25
Chromium	µg	<0.2			0.2
Cobalt	µg	<0.3			0.25
Copper	µg	<0.3			0.25
Lead	µg	<2			1.5
Manganese	µg	<0.3			0.25
Nickel	µg	<0.5			0.5
Phosphorus	µg	30			2.5
Selenium	µg	<2			1.5
Tellurium	µg	15			2
Thallium	µg	2			1.5
Vanadium	µg	<1			1
Zinc	µg	5.4			0.5
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		
Volume	Sample	mL	250		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 1B	µg/sample	<0.02		

Approved by:



Rachel Eden, B. Sc.
Operations Manager

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Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Filter Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883232 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248892 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver

** Reference Method Modified*

References

EMC Emission Measurement Center of EPA

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Filter Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875844 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237734 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Filter Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875844 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237734 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Reference Number	1875844-1	1875844-2
Sample Date	Feb 03, 2026	Feb 03, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Reagent Blank Unit 2 Container 1 (filter) / 19.9 °C	Reagent Blank Unit 3 Container 1 (filter) / 19.9 °C

		Matrix	Stack Samples	Stack Samples	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	5	<5		5
Antimony	µg	<2	<2		2.5
Arsenic	µg	5.0	2		1
Cadmium	µg	<0.3	<0.3		0.25
Chromium	µg	<0.2	<0.2		0.2
Cobalt	µg	<0.3	<0.3		0.25
Copper	µg	<0.3	2		0.25
Lead	µg	<2	<2		1.5
Manganese	µg	<0.3	<0.3		0.25
Nickel	µg	2	<0.5		0.5
Phosphorus	µg	10	8		2.5
Selenium	µg	<2	9.1		1.5
Tellurium	µg	12	<2		2
Thallium	µg	3.2	9.8		1.5
Vanadium	µg	<1	<1		1
Zinc	µg	5.1	5.4		0.5
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	
Volume	Sample	mL	250	250	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 1B	µg/sample	<0.02	<0.02	

Approved by:



Reena Sharma
Operations Chemist

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Filter Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875844 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237734 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver

** Reference Method Modified*

References

EMC Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

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Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883229 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248876 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Reagent Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883229**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248876
Report Type: Final Report

Reference Number 1883229-1
Sample Date Mar 05, 2026
Sample Time NA
Sample Location
Sample Description Reagent Blank Unit 1
/ 20.8 °C

Matrix Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	<5			5
Antimony	µg	<2			2.5
Arsenic	µg	5.7			1
Cadmium	µg	<0.3			0.25
Chromium	µg	<0.2			0.2
Cobalt	µg	0.5			0.25
Copper	µg	<0.3			0.25
Lead	µg	2.7			1.5
Manganese	µg	<0.3			0.25
Nickel	µg	<0.5			0.5
Phosphorus	µg	<2			2.5
Selenium	µg	<2			1.5
Tellurium	µg	6.7			2
Thallium	µg	9.3			1.5
Vanadium	µg	<1			1
Zinc	µg	3.0			0.5
Back Half Metals Fraction 2A					
Aluminum	µg	8			5
Antimony	µg	<3			2.5
Arsenic	µg	<1			1
Cadmium	µg	<0.3			0.25
Chromium	µg	0.51			0.2
Cobalt	µg	<0.3			0.25
Copper	µg	<0.3			0.25
Lead	µg	<2			1.5
Manganese	µg	<0.3			0.25
Nickel	µg	<0.5			0.5
Phosphorus	µg	10			2.5
Selenium	µg	3.6			1.5
Tellurium	µg	8.5			2
Thallium	µg	9.1			1.5
Vanadium	µg	<1			1
Zinc	µg	0.9			0.5
Volume	Sample	mL	215		
Volume	aliquot volume	mL	165		
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		

Analytical Report

Bill To: A. Lanfranco & Associates
#101, 9488 - 189 Street
Surrey, BC, Canada
V4N 4W7
Attn: Missy
Sampled By:
Company:

Project ID: Metro Vancouver WTE
Project Name: Reagent Blanks
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **1883229**
Control Number:
Date Received: Mar 18, 2026
Date Reported: Apr 9, 2026
Report Number: 3248876
Report Type: Final Report

Reference Number 1883229-1
Sample Date Mar 05, 2026
Sample Time NA
Sample Location
Sample Description Reagent Blank Unit 1
/ 20.8 °C

Matrix Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Volume	Sample	mL	250		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 1B	µg/sample	<0.02		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		
Volume	Sample	mL	215		
Volume	aliquot volume	mL	5.0		
Volume	Final	mL	40		
Mercury	Fraction 2B	µg/sample	<0.09		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		
Volume	Sample	mL	99		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3A	µg/sample	<0.008		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		
Volume	Sample	mL	500		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3B	µg/sample	<0.04		
Mercury	As Tested	µg/L	<0.05		0.05
Dilution Factor	As Tested		1		
Volume	Sample	mL	200		
Volume	aliquot volume	mL	25		
Volume	Final	mL	40		
Mercury	Fraction 3C	µg/sample	<0.02		

Approved by:



Rachel Eden, B. Sc.
Operations Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1883229 Control Number: Date Received: Mar 18, 2026 Date Reported: Apr 9, 2026 Report Number: 3248876 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Apr 07, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Mar 30, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Report Transmission Cover Page

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875695 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237463 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Contact	Company	Address
Mark Lanfranco	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: mark.lanfranco@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA / COC
Email	PDF	COC / Test Report
Email	PDF	Invoice
Missy	A. Lanfranco & Associates	#101, 9488 - 189 Street Surrey, BC V4N 4W7 Phone: (604) 881-2582 Fax: (604) 881-2581 Email: missy@alanfranco.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875695 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237463 Report Type: Final Report
Attn: Missy		
Sampled By:		
Company:		

Reference Number	1875695-1	1875695-2
Sample Date	Feb 03, 2026	Feb 03, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Reagent Blank Unit 2 / 20.0 °C	Reagent Blank Unit 3 / 20.0 °C
Matrix	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Front Half Metals Fraction 1A					
Aluminum	µg	<5	26		5
Antimony	µg	4	<2		2.5
Arsenic	µg	4.1	<1		1
Cadmium	µg	<0.3	<0.3		0.25
Chromium	µg	<0.2	0.69		0.2
Cobalt	µg	<0.3	<0.3		0.25
Copper	µg	<0.3	1		0.25
Lead	µg	<2	<2		1.5
Manganese	µg	0.3	<0.3		0.25
Nickel	µg	<0.5	<0.5		0.5
Phosphorus	µg	<2	<2		2.5
Selenium	µg	<2	<2		1.5
Tellurium	µg	5.9	6.6		2
Thallium	µg	<2	4.1		1.5
Vanadium	µg	<1	<1		1
Zinc	µg	0.9	9.2		0.5
Back Half Metals Fraction 2A					
Aluminum	µg	<5	<5		5
Antimony	µg	<3	5		2.5
Arsenic	µg	2.7	<1		1
Cadmium	µg	<0.3	0.3		0.25
Chromium	µg	<0.2	<0.2		0.2
Cobalt	µg	0.7	<0.3		0.25
Copper	µg	<0.3	3.8		0.25
Lead	µg	<2	<2		1.5
Manganese	µg	<0.3	0.4		0.25
Nickel	µg	<0.5	<0.5		0.5
Phosphorus	µg	8	20		2.5
Selenium	µg	2	36.6		1.5
Tellurium	µg	8.2	<2		2
Thallium	µg	<2	4.7		1.5
Vanadium	µg	<1	<1		1
Zinc	µg	1	2		0.5
Volume	Sample	mL	206	207	
Volume	aliquot volume	mL	156	157	
Mercury by CVAA					
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	

Analytical Report

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875695 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237463 Report Type: Final Report
Attn: Missy		
Sampled By:		
Company:		

Reference Number	1875695-1	1875695-2
Sample Date	Feb 03, 2026	Feb 03, 2026
Sample Time	NA	NA
Sample Location		
Sample Description	Reagent Blank Unit 2 / 20.0 °C	Reagent Blank Unit 3 / 20.0 °C
Matrix	Stack Samples	Stack Samples

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mercury by CVAA - Continued					
Volume	Sample	mL	250	250	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 1B	µg/sample	<0.02	<0.02	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	
Volume	Sample	mL	206	207	
Volume	aliquot volume	mL	5.0	5.0	
Volume	Final	mL	50	50	
Mercury	Fraction 2B	µg/sample	<0.1	<0.1	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	
Volume	Sample	mL	89	90	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3A	µg/sample	<0.007	<0.007	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	
Volume	Sample	mL	500	500	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3B	µg/sample	<0.04	<0.04	
Mercury	As Tested	µg/L	<0.05	<0.05	0.05
Dilution Factor	As Tested		1	1	
Volume	Sample	mL	200	200	
Volume	aliquot volume	mL	25	25	
Volume	Final	mL	40	40	
Mercury	Fraction 3C	µg/sample	<0.02	<0.02	

Approved by:



Reena Sharma
Operations Chemist

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Methodology and Notes

Bill To: A. Lanfranco & Associates #101, 9488 - 189 Street Surrey, BC, Canada V4N 4W7	Project ID: Metro Vancouver WTE Project Name: Reagent Blanks Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1875695 Control Number: Date Received: Feb 11, 2026 Date Reported: Mar 5, 2026 Report Number: 3237463 Report Type: Final Report
Attn: Missy Sampled By: Company:		

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Mercury in Air (VAN) - 1B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 2B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3A	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3B	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Mercury in Air (VAN) - 3C	EMC	* Metals Emissions from Stationary Sources, 29	Mar 04, 2026	Element Vancouver
Metals in Stack Samples - Back half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver
Metals in Stack Samples - Front half (VAN)	EMC	* Metals Emissions from Stationary Sources, 29	Feb 18, 2026	Element Vancouver

* Reference Method Modified

References

EMC Emission Measurement Center of EPA

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

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Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Your Project #: MVWTE
Site#: C607077
Site Location: BURNABY, BC
Your C.O.C. #: NA

Report Date: 2026/02/20
Report #: R8697897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C613749

Received: 2026/02/11, 09:29

Sample Matrix: Tedlar Bag
Samples Received: 6

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
Nitrous Oxide	6	N/A	2026/02/11	CAM SOP-00203	GC/ECD

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your Project #: MVWTE
Site#: C607077
Site Location: BURNABY, BC
Your C.O.C. #: NA

Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Report Date: 2026/02/20
Report #: R8697897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C613749

Received: 2026/02/11, 09:29

Encryption Key

Julian Tong
Project Manager Assistant
20 Feb 2026 13:29:07

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant
Email: Julian.Tong@bureauveritas.com
Phone# (905) 817-5700

=====

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BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

COMPRESSED GAS PARAMETERS (TEDLAR BAG)

Bureau Veritas ID		AZVJ77	AZVJ77	AZVJ78	AZVJ79		
Sampling Date		2026/02/04	2026/02/04	2026/02/04	2026/02/04		
COC Number		NA	NA	NA	NA		
	UNITS	EAN249-UNIT 2 BAG 1	EAN249-UNIT 2 BAG 1 Lab-Dup	EAN250-UNIT 2 BAG 2	EAN251-UNIT 2 BAG 3	RDL	QC Batch

Gas

Nitrous Oxide	ppmv	7.3	7.0	9.0	9.1	0.25	A103998
---------------	------	-----	-----	-----	-----	------	---------

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		AZVJ80	AZVJ81	AZVJ82		
Sampling Date		2026/02/05	2026/02/05	2026/02/05		
COC Number		NA	NA	NA		
	UNITS	EAN252-UNIT 3 BAG 1	EAN253-UNIT 3 BAG 2	EAN254-UNIT 3 BAG 3	RDL	QC Batch

Gas

Nitrous Oxide	ppmv	4.2	3.4	3.1	0.25	A103998
---------------	------	-----	-----	-----	------	---------

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C613749
Report Date: 2026/02/20

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

TEST SUMMARY

Bureau Veritas ID: AZVJ77
Sample ID: EAN249-UNIT 2 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ77 Dup
Sample ID: EAN249-UNIT 2 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ78
Sample ID: EAN250-UNIT 2 BAG 2
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ79
Sample ID: EAN251-UNIT 2 BAG 3
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ80
Sample ID: EAN252-UNIT 3 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ81
Sample ID: EAN253-UNIT 3 BAG 2
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ82
Sample ID: EAN254-UNIT 3 BAG 3
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah



**BUREAU
VERITAS**

Bureau Veritas Job #: C613749
Report Date: 2026/02/20

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

GENERAL COMMENTS

The samples were analysed 6 and 7 days after the date of sampling. The recommended holding time is 2 days.

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

QUALITY ASSURANCE REPORT

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

QC Batch	Parameter	Date	Method Blank		RPD	
			Value	UNITS	Value (%)	QC Limits
A103998	Nitrous Oxide	2026/02/11	<0.1	ppmv	NC	N/A
N/A = Not Applicable						
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.						
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.						
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).						



BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C613749

2026/02/11 09:29

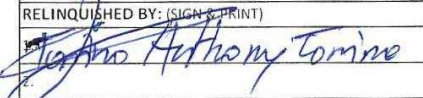
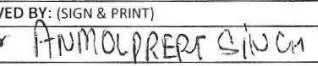
BUREAU
VERITAS

Sent to: Bureau Veritas Campobello
6740 Campobello Road
Mississauga, ON, L5N 2L8
Tel: (905) 817-5700

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

Page 01 of 01

COC # C607077-ONTV-01-01

REPORT INFORMATION								ANALYSIS REQUESTED										Job Barcode Label	
Company: Bureau Veritas								 NONT-2026-02-1654											
Address: 4606 Canada Way, Burnaby, British Columbia, V5G 1K5																			
Contact Name: Shanaz Akbar																			
Email: Shanaz.Akbar@bureauveritas.com, Customersolutionswest@bureauveritas.com																			
Phone:																			
BV Project #: C607077																			
Client Invoice To: A. LANFRANCO & ASSOCIATES INC. (1301)																			
Client Report To: A. LANFRANCO & ASSOCIATES INC. (1301) Incl. on Report? Yes / No																			
#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.												ADDITIONAL SAMPLE INFORMATION	
1	EAN249-UNIT 2 BAG 1	AIR	2026/02/04			1	X											(P: 01)	
2	EAN250-UNIT 2 BAG 2	AIR	2026/02/04			1	X											(P: 01)	
3	EAN251-UNIT 2 BAG 3	AIR	2026/02/04			1	X											(P: 01)	
4	EAN252-UNIT 3 BAG 1	AIR	2026/02/05			1	X											(P: 01)	
5	EAN253-UNIT 3 BAG 2	AIR	2026/02/05			1	X											(P: 01)	
6	EAN254-UNIT 3 BAG 3	AIR	2026/02/05			1	X											(P: 01)	
7																			
8																			
9																			
10																			
SITE LOCATION: BURNABY, BC			REGULATORY CRITERIA			SPECIAL INSTRUCTIONS			REQUIRED EDDs			TURNAROUND TIME							
SITE #:						Please inform Bureau Veritas immediately if you are not accredited for the requested test(s) or the hold time is approaching. **Please return a copy of this form with the report.** DO NOT DISCARD, RETURN TO CLIENT AFTER ANALYSIS; SHIP USING Purolator account 2269965"			National Excel (N001)			☐ Rush Required 2026/02/26 Date Required Please inform us if rush charges will be incurred.							
PROJECT #:																			
MVWTE																			
PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:																			
COOLER ID:			COOLER ID:			COOLER ID:			RECEIVING LAB USE ONLY										
Custody Seal Present			Custody Seal Present			Custody Seal Present			Bureau Veritas Job #										
Custody Seal Intact			Custody Seal Intact			Custody Seal Intact													
Cooling Media Present			Cooling Media Present			Cooling Media Present													
Temp: (°C)			Temp: (°C)			Temp: (°C)													
RELINQUISHED BY: (SIGN & PRINT)			DATE: (YYYY/MM/DD)			TIME: (HH:MM)			RECEIVED BY: (SIGN & PRINT)			DATE: (YYYY/MM/DD)			TIME: (HH:MM)				
			2026/02/10			15:00			1. 			2026/02/11			09:29				
									2.										



Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Your Project #: MVWTE
Site#: C607077
Site Location: BURNABY, BC
Your C.O.C. #: NA

Report Date: 2026/02/20
Report #: R8697897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C613749

Received: 2026/02/11, 09:29

Sample Matrix: Tedlar Bag
Samples Received: 6

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
Nitrous Oxide	6	N/A	2026/02/11	CAM SOP-00203	GC/ECD

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your Project #: MVWTE
Site#: C607077
Site Location: BURNABY, BC
Your C.O.C. #: NA

Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Report Date: 2026/02/20
Report #: R8697897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C613749

Received: 2026/02/11, 09:29

Encryption Key

Julian Tong
Project Manager Assistant
20 Feb 2026 13:29:07

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant
Email: Julian.Tong@bureauveritas.com
Phone# (905) 817-5700

=====

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BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

COMPRESSED GAS PARAMETERS (TEDLAR BAG)

Bureau Veritas ID		AZVJ77	AZVJ77	AZVJ78	AZVJ79		
Sampling Date		2026/02/04	2026/02/04	2026/02/04	2026/02/04		
COC Number		NA	NA	NA	NA		
	UNITS	EAN249-UNIT 2 BAG 1	EAN249-UNIT 2 BAG 1 Lab-Dup	EAN250-UNIT 2 BAG 2	EAN251-UNIT 2 BAG 3	RDL	QC Batch

Gas

Nitrous Oxide	ppmv	7.3	7.0	9.0	9.1	0.25	A103998
---------------	------	-----	-----	-----	-----	------	---------

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		AZVJ80	AZVJ81	AZVJ82		
Sampling Date		2026/02/05	2026/02/05	2026/02/05		
COC Number		NA	NA	NA		
	UNITS	EAN252-UNIT 3 BAG 1	EAN253-UNIT 3 BAG 2	EAN254-UNIT 3 BAG 3	RDL	QC Batch

Gas

Nitrous Oxide	ppmv	4.2	3.4	3.1	0.25	A103998
---------------	------	-----	-----	-----	------	---------

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C613749
Report Date: 2026/02/20

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

TEST SUMMARY

Bureau Veritas ID: AZVJ77
Sample ID: EAN249-UNIT 2 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ77 Dup
Sample ID: EAN249-UNIT 2 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ78
Sample ID: EAN250-UNIT 2 BAG 2
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ79
Sample ID: EAN251-UNIT 2 BAG 3
Matrix: Tedlar Bag

Collected: 2026/02/04
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ80
Sample ID: EAN252-UNIT 3 BAG 1
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ81
Sample ID: EAN253-UNIT 3 BAG 2
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah

Bureau Veritas ID: AZVJ82
Sample ID: EAN254-UNIT 3 BAG 3
Matrix: Tedlar Bag

Collected: 2026/02/05
Shipped:
Received: 2026/02/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A103998	N/A	2026/02/11	Vasan Thiagarajah



**BUREAU
VERITAS**

Bureau Veritas Job #: C613749
Report Date: 2026/02/20

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

GENERAL COMMENTS

The samples were analysed 6 and 7 days after the date of sampling. The recommended holding time is 2 days.

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

QUALITY ASSURANCE REPORT

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

QC Batch	Parameter	Date	Method Blank		RPD	
			Value	UNITS	Value (%)	QC Limits
A103998	Nitrous Oxide	2026/02/11	<0.1	ppmv	NC	N/A
N/A = Not Applicable						
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.						
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.						
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).						



BUREAU
VERITAS

Bureau Veritas Job #: C613749

Report Date: 2026/02/20

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

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C613749

2026/02/11 09:29

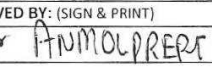
BUREAU
VERITAS

Sent to: Bureau Veritas Campobello
6740 Campobello Road
Mississauga, ON, L5N 2L8
Tel: (905) 817-5700

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

Page 01 of 01

COC # C607077-ONTV-01-01

REPORT INFORMATION								ANALYSIS REQUESTED										Job Barcode Label	
Company: Bureau Veritas								 NONT-2026-02-1654											
Address: 4606 Canada Way, Burnaby, British Columbia, V5G 1K5																			
Contact Name: Shanaz Akbar																			
Email: Shanaz.Akbar@bureauveritas.com, Customersolutionswest@bureauveritas.com																			
Phone:																			
BV Project #: C607077																			
Client Invoice To: A. LANFRANCO & ASSOCIATES INC. (1301)																			
Client Report To: A. LANFRANCO & ASSOCIATES INC. (1301) Incl. on Report? Yes / No																			
#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.												ADDITIONAL SAMPLE INFORMATION	
1	EAN249-UNIT 2 BAG 1	AIR	2026/02/04			1	X											(P: 01)	
2	EAN250-UNIT 2 BAG 2	AIR	2026/02/04			1	X											(P: 01)	
3	EAN251-UNIT 2 BAG 3	AIR	2026/02/04			1	X											(P: 01)	
4	EAN252-UNIT 3 BAG 1	AIR	2026/02/05			1	X											(P: 01)	
5	EAN253-UNIT 3 BAG 2	AIR	2026/02/05			1	X											(P: 01)	
6	EAN254-UNIT 3 BAG 3	AIR	2026/02/05			1	X											(P: 01)	
7																			
8																			
9																			
10																			
SITE LOCATION: BURNABY, BC			REGULATORY CRITERIA			SPECIAL INSTRUCTIONS			REQUIRED EDDs			TURNAROUND TIME							
SITE #:						Please inform Bureau Veritas immediately if you are not accredited for the requested test(s) or the hold time is approaching. **Please return a copy of this form with the report.** DO NOT DISCARD, RETURN TO CLIENT AFTER ANALYSIS; SHIP USING Purolator account 2269965"			National Excel (N001)			☐ Rush Required 2026/02/26 Date Required Please inform us if rush charges will be incurred.							
PROJECT #:																			
MVWTE																			
PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:																			
COOLER ID:			COOLER ID:			COOLER ID:			RECEIVING LAB USE ONLY										
Custody Seal Present			Custody Seal Present			Custody Seal Present			Bureau Veritas Job #										
Custody Seal Intact			Custody Seal Intact			Custody Seal Intact													
Cooling Media Present			Cooling Media Present			Cooling Media Present													
Temp: (°C)			Temp: (°C)			Temp: (°C)													
RELINQUISHED BY: (SIGN & PRINT)			DATE: (YYYY/MM/DD)			TIME: (HH:MM)			RECEIVED BY: (SIGN & PRINT)			DATE: (YYYY/MM/DD)			TIME: (HH:MM)				
			20260210			15:00			1. 			20260211			09:29				
									2.										



Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Your Project #: MVWTE
Site#: C612563
Site Location: BURNABY, BC
Your C.O.C. #: NA

Report Date: 2026/03/16
Report #: R8708874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C624661

Received: 2026/03/11, 10:07

Sample Matrix: Tedlar Bag
Samples Received: 3

Analyses	Date		Date Analyzed	Laboratory Method	Analytical Method
	Quantity	Extracted			
Nitrous Oxide	3	N/A	2026/03/16	CAM SOP-00203	GC/ECD

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your Project #: MVWTE
Site#: C612563
Site Location: BURNABY, BC
Your C.O.C. #: NA

Attention: Shanaz Akbar

Bureau Veritas
4606 Canada Way
Burnaby, BC
CANADA V5G 1K5

Report Date: 2026/03/16
Report #: R8708874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C624661

Received: 2026/03/11, 10:07

Encryption Key

Julian Tong
Project Manager Assistant
17 Mar 2026 16:18:19

Please direct all questions regarding this Certificate of Analysis to:

Julian Tong, Project Manager Assistant
Email: Julian.Tong@bureauveritas.com
Phone# (905) 817-5700

=====

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BUREAU
VERITAS

Bureau Veritas Job #: C624661

Report Date: 2026/03/16

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

COMPRESSED GAS PARAMETERS (TEDLAR BAG)

Bureau Veritas ID		BAQU03	BAQU03	BAQU04	BAQU05		
Sampling Date		2026/03/06 10:40	2026/03/06 10:40	2026/03/06 11:53	2026/03/06 13:03		
COC Number		NA	NA	NA	NA		
	UNITS	EBV839-UNIT 1 BAG 1	EBV839-UNIT 1 BAG 1 Lab-Dup	EBV840-UNIT 1 BAG 2	EBV841-UNIT 1 BAG 3	RDL	QC Batch

Gas							
Nitrous Oxide	ppmv	3.2	3.0	3.8	3.0	0.25	A116046

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



BUREAU
VERITAS

Bureau Veritas Job #: C624661
Report Date: 2026/03/16

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

TEST SUMMARY

Bureau Veritas ID: BAQU03
Sample ID: EBV839-UNIT 1 BAG 1
Matrix: Tedlar Bag

Collected: 2026/03/06
Shipped:
Received: 2026/03/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A116046	N/A	2026/03/16	Satvinder Bhathal

Bureau Veritas ID: BAQU03 Dup
Sample ID: EBV839-UNIT 1 BAG 1
Matrix: Tedlar Bag

Collected: 2026/03/06
Shipped:
Received: 2026/03/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A116046	N/A	2026/03/16	Satvinder Bhathal

Bureau Veritas ID: BAQU04
Sample ID: EBV840-UNIT 1 BAG 2
Matrix: Tedlar Bag

Collected: 2026/03/06
Shipped:
Received: 2026/03/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A116046	N/A	2026/03/16	Satvinder Bhathal

Bureau Veritas ID: BAQU05
Sample ID: EBV841-UNIT 1 BAG 3
Matrix: Tedlar Bag

Collected: 2026/03/06
Shipped:
Received: 2026/03/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrous Oxide	GC/ECD	A116046	N/A	2026/03/16	Satvinder Bhathal



**BUREAU
VERITAS**

Bureau Veritas Job #: C624661
Report Date: 2026/03/16

Bureau Veritas
Client Project #: MVWTE
Site Location: BURNABY, BC

GENERAL COMMENTS

Nitrous Oxide Analysis: The samples weres analysed 6 days after the date of sampling. The recommended holding time is 2 days.

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C624661

Report Date: 2026/03/16

QUALITY ASSURANCE REPORT

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

QC Batch	Parameter	Date	Method Blank		RPD	
			Value	UNITS	Value (%)	QC Limits
A116046	Nitrous Oxide	2026/03/16	<0.1	ppmv	NC	N/A
N/A = Not Applicable Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement. Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination. NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times$ RDL).						



BUREAU
VERITAS

Bureau Veritas Job #: C624661

Report Date: 2026/03/16

Bureau Veritas

Client Project #: MVWTE

Site Location: BURNABY, BC

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

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C624661

2026/03/11 10:07



Sent to: Bureau Veritas Campbell
6740 Campbell Road
Mississauga, ON, L5N 2L8
Tel: (905) 817-5700

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

Page 01 of 01

COC # C612563-ONTV-01-01

REPORT INFORMATION							ANALYSIS REQUESTED										Job Barcode Label																																																	
Company: Bureau Veritas							 NONT-2026-03-1683																																																											
Address: 4606 Canada Way, Burnaby, British Columbia, V5G 1K5																																																																		
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BV Project #: C612563																																																																		
Client Invoice To: A. LANFRANCO & ASSOCIATES INC. (1301)																																																																		
Client Report To: A. LANFRANCO & ASSOCIATES INC. (1301)																																																																		
Incl. on Report? Yes / No																																																																		
#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	N2O Gas CSA Z2396.1-09 Subcontract										ADDITIONAL SAMPLE INFORMATION																																																	
1	EBV839-UNIT 1 BAG 1	AIR	2026/03/06	10:40		1	X										(P: 01)																																																	
2	EBV840-UNIT 1 BAG 2	AIR	2026/03/06	11:53		1	X										(P: 01)																																																	
3	EBV841-UNIT 1 BAG 3	AIR	2026/03/06	13:03		1	X										(P: 01)																																																	
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SITE LOCATION:							REGULATORY CRITERIA					SPECIAL INSTRUCTIONS					REQUIRED EDDs		TURNAROUND TIME																																															
BURNABY, BC												Please inform Bureau Veritas immediately if you are not accredited for the requested test(s) or the hold time is approaching. **Please return a copy of this form with the report.**					National Excel (N001)		☐ Rush Required 2026/03/25 Date Required Please inform us if rush charges will be incurred.																																															
SITE #:																																																																		
PROJECT #:																																																																		
PO/A/E, TASK ORDER/SERVICE ORDER, LINE ITEM:																																																																		
COOLER ID:							COOLER ID:					COOLER ID:					RECEIVING LAB USE ONLY																																																	
<table border="1"> <tr> <td></td><td>YES</td><td>NO</td><td rowspan="4">Temp: (°C)</td><td rowspan="4">1</td><td rowspan="4">2</td><td rowspan="4">3</td> </tr> <tr> <td>Custody Seal Present</td><td></td><td></td> </tr> <tr> <td>Custody Seal Intact</td><td></td><td></td> </tr> <tr> <td>Cooling Media Present</td><td></td><td></td> </tr> </table>								YES	NO	Temp: (°C)	1	2	3	Custody Seal Present			Custody Seal Intact			Cooling Media Present			<table border="1"> <tr> <td></td><td>YES</td><td>NO</td><td rowspan="4">Temp: (°C)</td><td rowspan="4">1</td><td rowspan="4">2</td><td rowspan="4">3</td> </tr> <tr> <td>Custody Seal Present</td><td></td><td></td> </tr> <tr> <td>Custody Seal Intact</td><td></td><td></td> </tr> <tr> <td>Cooling Media Present</td><td></td><td></td> </tr> </table>						YES	NO	Temp: (°C)	1	2	3	Custody Seal Present			Custody Seal Intact			Cooling Media Present			<table border="1"> <tr> <td></td><td>YES</td><td>NO</td><td rowspan="4">Temp: (°C)</td><td rowspan="4">1</td><td rowspan="4">2</td><td rowspan="4">3</td> </tr> <tr> <td>Custody Seal Present</td><td></td><td></td> </tr> <tr> <td>Custody Seal Intact</td><td></td><td></td> </tr> <tr> <td>Cooling Media Present</td><td></td><td></td> </tr> </table>						YES	NO	Temp: (°C)	1	2	3	Custody Seal Present			Custody Seal Intact			Cooling Media Present			Bureau Veritas Job #	
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RELINQUISHED BY: (SIGN & PRINT)							DATE: (YYYY/MM/DD)					TIME: (HH:MM)					RECEIVED BY: (SIGN & PRINT)		DATE: (YYYY/MM/DD)		TIME: (HH:MM)																																													
1. Emmanuel Salido EV							2026/03/11					15:00					2. Anmol Preet Singh		2026/03/11		10:07																																													

APPENDIX - D

COMPUTER GENERATED RESULTS

Client: Metro Vancouver
Jobsite: WTE (Burnaby, BC)
Source: Unit 1

Date: 5-Mar-26
Run: 1 - Particulate / Metals
Run Time: 11:12 - 13:13

Concentrations:

Particulate	2.01 mg/dscm	0.00088 gr/dscf
	1.13 mg/Acm	0.00049 gr/Acf
	1.75 mg/dscm (@ 11% O2)	0.00077 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.133 Kg/hr	0.293 lb/hr
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Flue Gas Characteristics:

Flow	1101 dscm/min	38881 dscf/min
	18.35 dscm/sec	648 dscf/sec
	1959 Acn/min	69186 Acf/min

Velocity	12.819 m/sec	42.06 f/sec
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Temperature	149.5 oC	301.1 oF
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Moisture	15.4 %
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Gas Analysis	9.5 % O2
	10.3 % CO2

30.034 Mol. Wt (g/gmole) Dry
28.176 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.5323 dscm	89.430 dscf
Sample Time	120.0 minutes	
Isokineticity	104.7 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE (Burnaby, BC)
Source: Unit 1

Date: 5-Mar-26
Run: 1 - Particulate / Metals
Run Time: 08:30 - 10:34

Control Unit (Y) 0.9604
 Nozzle Diameter (in.) 0.3034
 Pitot Factor 0.8492
 Baro. Press. (in. Hg) 30.03
 Static Press. (in. H2O) -18.50
 Stack Height (ft) 30
 Stack Diameter (in.) 70.90
 Stack Area (sq.ft.) 27.417
 Minutes Per Reading 5.0
 Minutes Per Point 5.0

Collection:
 Filter (grams) 0.00030
 Washings (grams) 0.00480
 Traverse 1
 Traverse 2
Total (grams) 0.00510

Gas Analysis (Vol. %):

CO2	O2
Traverse 1 10.17	9.65
Traverse 2 10.50	9.37
10.33	9.51

Condensate Collection:

Impinger 1	235.0
Impinger 2	74.0
Impinger 3	23.0
Impinger 4	2.0
Impinger 5	0.0
Impinger 6	0.0
Gel	13.0

Gain (grams) 347.0

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ^P (in. H2O)	Orifice ^H (in. H2O)	Dry Gas Temperature Inlet (oF)	Dry Gas Temperature Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	558.627								
1	5.0	561.980	0.28	1.40	56	56	4	296	1.5	104.8
2	10.0	565.440	0.30	1.50	57	57	4	298	4.7	104.4
3	15.0	569.020	0.32	1.60	57	57	4	298	8.4	104.7
4	20.0	572.710	0.34	1.70	58	58	4	299	12.5	104.6
5	25.0	576.560	0.37	1.85	58	58	4	300	17.7	104.7
6	30.0	580.320	0.35	1.75	59	59	4	301	25.2	105.0
7	35.0	584.330	0.40	2.01	60	60	4	301	45.6	104.6
8	40.0	588.200	0.37	1.85	60	60	4	302	53.2	105.0
9	45.0	591.960	0.35	1.76	60	60	4	300	58.3	104.7
10	50.0	595.680	0.34	1.71	61	61	4	299	62.5	104.8
11	55.0	599.330	0.33	1.66	61	61	4	302	66.1	104.6
12	60.0	602.820	0.30	1.51	61	61	4	298	69.4	104.5
Traverse 2	0.0	602.820								
1	5.0	606.640	0.36	1.81	62	62	4	303	1.5	104.7
2	10.0	610.580	0.38	1.91	63	63	4	304	4.7	105.0
3	15.0	614.560	0.39	1.96	63	63	4	305	8.4	104.8
4	20.0	618.690	0.42	2.11	63	63	4	304	12.5	104.7
5	25.0	622.980	0.45	2.27	64	64	4	303	17.7	104.9
6	30.0	627.320	0.46	2.32	64	64	4	303	25.2	104.9
7	35.0	631.460	0.42	2.12	64	64	4	302	45.6	104.6
8	40.0	635.460	0.39	1.97	65	65	4	303	53.2	104.8
9	45.0	639.320	0.36	1.82	66	66	4	302	58.3	104.9
10	50.0	642.920	0.32	1.62	65	65	4	303	62.5	104.0
11	55.0	646.430	0.30	1.52	66	66	4	302	66.1	104.4
12	60.0	649.880	0.29	1.48	66	66	4	299	69.4	104.2
Average:			0.358	1.800	61.6	61.6	4.0	301.1		104.7

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C.)
Source: Unit 1

Date: 6-Mar-26
Run: 2 - Particulate / Metals
Run Time: 09:10 - 11:11

Concentrations:

Particulate	1.35 mg/dscm	0.00059 gr/dscf
	0.74 mg/Acm	0.00032 gr/Acf
	1.16 mg/dscm (@ 11% O2)	0.00051 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.100 Kg/hr	0.220 lb/hr
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Flue Gas Characteristics:

Flow	1230 dscm/min	43450 dscf/min
	20.51 dscm/sec	724 dscf/sec
	2253 Acm/min	79561 Acf/min
Velocity	14.742 m/sec	48.36 f/sec
Temperature	154.9 oC	310.9 oF
Moisture	16.7 %	
Gas Analysis	9.4 % O2	
	10.5 % CO2	
	30.056 Mol. Wt (g/gmole) Dry	
	28.041 Mol. Wt (g/gmole) Wet	

Sample Parameters:

Sample Volume	2.8121 dscm	99.308 dscf
Sample Time	120.0 minutes	
Isokineticity	104.0 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 1

Date: 6-Mar-26
Run: 2 - Particulate / Metals
Run Time: 09:10 - 11:11

Control Unit (Y)	0.9604	Collection:	Gas Analysis (Vol. %):	Condensate Collection:
Nozzle Diameter (in.)	0.3034	Filter (grams) 0.00010	CO2 O2	Impinger 1 240.0
Pitot Factor	0.8492	Washings (grams) 0.00370	10.17 9.62	Impinger 2 146.0
Baro. Press. (in. Hg)	30.01	Traverse 1	10.83 9.20	Impinger 3 22.0
Static Press. (in. H2O)	-18.50	Traverse 2		Impinger 4 0.0
Stack Height (ft)	30	Total (grams) 0.00380		Impinger 5 0.0
Stack Diameter (in.)	70.90			Impinger 6 0.0
Stack Area (sq.ft.)	27.417			Gel 15.5
Minutes Per Reading	5.0		10.50 9.41	Gain (grams) 423.5
Minutes Per Point	5.0			

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ΔP (in. H2O)	Orifice ΔH (in. H2O)	Dry Gas Temperature Inlet (oF)	Dry Gas Temperature Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	651.052								
1	5.0	655.420	0.51	2.42	50	50	4	301	1.5	104.2
2	10.0	659.880	0.53	2.51	51	51	4	304	4.7	104.4
3	15.0	664.440	0.56	2.64	52	52	4	310	8.4	104.1
4	20.0	668.920	0.55	2.57	52	52	4	314	12.5	103.5
5	25.0	673.500	0.56	2.62	52	52	4	315	17.7	104.9
6	30.0	677.980	0.54	2.52	52	52	5	315	25.2	104.5
7	35.0	682.380	0.52	2.44	53	53	5	315	45.6	104.3
8	40.0	686.620	0.48	2.26	54	54	5	314	53.2	104.3
9	45.0	690.720	0.45	2.12	55	55	5	314	58.3	104.0
10	50.0	694.340	0.35	1.66	56	56	5	312	62.5	103.6
11	55.0	697.820	0.32	1.52	57	57	5	310	66.1	103.8
12	60.0	701.220	0.30	1.44	58	58	5	303	69.4	104.1
Traverse 2	0.0	701.220								
1	5.0	704.700	0.32	1.53	60	60	4	308	1.5	103.1
2	10.0	708.380	0.35	1.68	62	62	4	310	4.7	104.0
3	15.0	712.220	0.38	1.82	63	63	4	311	8.4	104.1
4	20.0	716.340	0.44	2.11	62	62	5	311	12.5	104.0
5	25.0	720.540	0.46	2.21	62	62	5	310	17.7	103.7
6	30.0	724.920	0.50	2.40	62	62	5	311	25.2	103.8
7	35.0	729.400	0.52	2.49	63	63	6	312	45.6	104.0
8	40.0	733.980	0.54	2.59	63	63	6	312	53.2	104.4
9	45.0	738.590	0.55	2.63	63	63	6	313	58.3	104.2
10	50.0	743.030	0.51	2.44	64	64	6	314	62.5	104.0
11	55.0	747.430	0.50	2.40	64	64	6	314	66.1	104.1
12	60.0	751.660	0.46	2.22	64	64	6	308	69.4	103.9
Average:			0.467	2.218	58.1	58.1	4.9	310.9		104.0

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C.)
Source: Unit 1

Date: 6-Mar-26
Run: 3 - Particulate / Metals
Run Time: 11:29 - 13:31

Concentrations:

Particulate	1.2 mg/dscm	0.0005 gr/dscf
	0.7 mg/Acm	0.0003 gr/Acf
	1.1 mg/dscm (@ 11% O2)	0.0005 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.088 Kg/hr	0.195 lb/hr
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Flue Gas Characteristics:

Flow	1254 dscm/min	44282 dscf/min
	20.90 dscm/sec	738 dscf/sec
	2230 Acm/min	78748 Acf/min

Velocity	14.591 m/sec	47.87 f/sec
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Temperature	152.4 oC	306.3 oF
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Moisture	14.8 %
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Gas Analysis	10.3 % O2
	9.5 % CO2

29.930 Mol. Wt (g/gmole) Dry
28.170 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.8102 dscm	99.242 dscf
Sample Time	120.0 minutes	
Isokineticity	102.0 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Date: 6-Mar-26
Run: 3 - Particulate / Metals
Run Time: 11:29 - 13:31

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ΔP (in. H2O)	Orifice ΔH (in. H2O)	Dry Gas Temperature		Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
					Inlet (oF)	Outlet (oF)				
Traverse 1	0.0	751.858								
1	5.0	755.420	0.32	1.56	63	63	3	300	1.5	102.2
2	10.0	759.200	0.36	1.76	63	63	3	298	4.7	102.2
3	15.0	763.020	0.37	1.81	63	63	3	296	8.4	101.7
4	20.0	767.050	0.41	2.01	63	63	3	295	12.5	101.9
5	25.0	771.160	0.43	2.09	63	63	3	302	17.7	102.0
6	30.0	775.540	0.49	2.37	63	63	3	305	25.2	102.1
7	35.0	779.980	0.51	2.47	64	64	3	307	45.6	101.4
8	40.0	784.520	0.52	2.53	65	65	3	303	53.2	102.2
9	45.0	789.120	0.54	2.61	64	64	3	308	58.3	102.2
10	50.0	793.540	0.50	2.41	65	65	3	310	62.5	101.9
11	55.0	797.840	0.47	2.27	66	66	3	312	66.1	102.2
12	60.0	801.960	0.43	2.09	66	66	3	306	69.4	101.9
Traverse 2	0.0	801.960								
1	5.0	806.400	0.50	2.42	67	67	4	309	1.5	101.9
2	10.0	810.890	0.51	2.47	68	68	4	310	4.7	102.0
3	15.0	815.500	0.54	2.62	67	67	4	309	8.4	101.9
4	20.0	820.080	0.53	2.56	67	67	4	311	12.5	102.3
5	25.0	824.700	0.54	2.62	68	68	5	311	17.7	102.1
6	30.0	829.230	0.52	2.52	68	68	5	310	25.2	101.9
7	35.0	833.640	0.49	2.38	67	67	5	308	45.6	102.2
8	40.0	838.080	0.50	2.42	67	67	5	311	53.2	102.1
9	45.0	842.400	0.47	2.29	68	68	5	308	58.3	102.0
10	50.0	846.580	0.44	2.14	68	68	5	310	62.5	102.1
11	55.0	850.320	0.35	1.71	68	68	5	307	66.1	102.1
12	60.0	853.900	0.32	1.57	69	69	5	305	69.4	101.9
Average:			0.461	2.238	65.8	65.8	3.8	306.3		102.0

Client: Metro Vancouver
Jobsite: WTE (Burnaby,B.C)
Source: Unit 1

Sample Type: HF, HCl, NH ₃				
Parameter		Test 1	Test 2	Test 3
Test Date		6-Mar-26	6-Mar-26	6-Mar-26
Test Time		09:40 - 10:40	10:53 - 11:53	12:03 - 13:03
Test Duration	(min.)	60	60	60
Baro. Press.	(in. Hg)	30.29	30.29	30.29
DGM Factor	(Y)	1.0203	1.0203	1.0203
Initial Reading	(m ³)	199.496	199.646	199.796
Final Reading	(m ³)	199.645	199.793	199.972
Temp. Outlet	(Avg. oF)	50.5	50.5	51.5
Orifice Press.	(ΔH in.H ₂ O)	0.50	0.50	0.50
Gas Volume	(Sm ³)	0.16	0.16	0.19
HF	(mg)	0.03	0.11	0.03
HCl	(mg)	0.22	3.0	0.1
NH ₃	(mg)	0.0	1.0	0.0
Oxygen	(Vol. %)	9.5	9.4	10.3
HF	(mg/Sm ³)	0.165	0.670	0.141
HF	(mg/Sm ³ @ 11% O ₂)	0.144	0.577	0.131
HCl	(mg/Sm ³)	1.35	18.9	0.44
HCl	(mg/Sm ³ @ 11% O ₂)	1.18	16.3	0.41
NH ₃	(mg/Sm ³)	0.01	6.47	0.05
NH ₃	(mg/Sm ³ @ 11% O ₂)	0.01	5.58	0.05
Moisture	(Vol. %)	16.7	16.7	14.8

Tstd. (oF) 68

Pstd. (in. Hg) 29.92

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 2

Date: 4-Feb-26
Run: 1 - Particulate / Metals
Run Time: 08:56 - 10:58

Concentrations:

Particulate	2.1 mg/dscm	0.0009 gr/dscf
	1.2 mg/Acm	0.0005 gr/Acf
	1.8 mg/dscm (@ 11% O2)	0.0008 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.132 Kg/hr	0.291 lb/hr
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Flue Gas Characteristics:

Flow	1041 dscm/min	36772 dscf/min
	17.35 dscm/sec	613 dscf/sec
	1848 Acf/min	65273 Acf/min

Velocity	12.094 m/sec	39.68 f/sec
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Temperature	152.3 oC	306.1 oF
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Moisture	16.2 %
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Gas Analysis	9.5 % O2
	10.0 % CO2

29.982 Mol. Wt (g/gmole) Dry
28.039 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.3177 dscm	81.849 dscf
Sample Time	120.0 minutes	
Isokineticity	101.3 %	

*** Standard Conditions:**

Metric:	20 deg C, 101.325 kPa
Imperial:	68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 2

Date: 4-Feb-26
Run: 1 - Particulate / Metals
Run Time: 08:56 - 10:58

Control Unit (Y) 1.0137
 Nozzle Diameter (in.) 0.3034
 Pitot Factor 0.8347
 Baro. Press. (in. Hg) 30.26
 Static Press. (in. H2O) -14.50
 Stack Height (ft) 30
 Stack Diameter (in.) 70.90
 Stack Area (sq.ft.) 27.417
 Minutes Per Reading 5.0
 Minutes Per Point 5.0

Collection:
 Filter (grams) 0.00050
 Washings (grams) 0.00440
Total (grams) 0.00490

Gas Analysis (Vol. %):
 CO2 O2
 Traverse 1 9.40 10.1
 Traverse 2 10.6 8.87
10.02 9.49

Condensate Collection:
 Impinger 1 193.0
 Impinger 2 123.0
 Impinger 3 4.0
 Impinger 4 2.0
 Impinger 5 1.0
 Impinger 6 1.0
 Gel 12.5
Gain (grams) 336.5

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ^P (in. H2O)	Orifice ^H (in. H2O)	Dry Gas Temperature Inlet (oF)	Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	886.082								
1	5.0	888.880	0.24	1.25	60	60	4	295	1.5	101.1
2	10.0	891.830	0.27	1.39	62	62	4	310	4.7	101.1
3	15.0	894.670	0.25	1.28	62	62	4	311	8.4	101.2
4	20.0	897.560	0.26	1.33	62	62	4	312	12.5	101.1
5	25.0	900.340	0.24	1.23	62	62	4	310	17.7	101.0
6	30.0	903.070	0.23	1.18	63	63	4	309	25.2	101.1
7	35.0	906.590	0.38	1.96	64	64	5	308	45.6	101.3
8	40.0	910.430	0.45	2.33	65	65	5	307	53.2	101.4
9	45.0	914.370	0.47	2.44	66	66	5	306	58.3	101.6
10	50.0	918.480	0.51	2.66	67	67	5	305	62.5	101.5
11	55.0	922.310	0.44	2.30	68	68	5	304	66.1	101.5
12	60.0	925.970	0.40	2.11	69	69	5	301	69.4	101.3
Traverse 2	0.0	925.970								
1	5.0	929.580	0.39	2.05	69	69	4	303	1.5	101.3
2	10.0	933.370	0.43	2.25	70	70	4	306	4.7	101.3
3	15.0	937.210	0.44	2.31	71	71	4	307	8.4	101.4
4	20.0	941.000	0.43	2.25	71	71	5	307	12.5	101.2
5	25.0	944.930	0.46	2.41	72	72	5	309	17.7	101.5
6	30.0	948.910	0.47	2.47	73	73	5	308	25.2	101.4
7	35.0	951.930	0.27	1.42	73	73	5	306	45.6	101.1
8	40.0	954.840	0.25	1.32	73	73	5	306	53.2	101.2
9	45.0	957.640	0.23	1.22	74	74	4	305	58.3	101.3
10	50.0	960.310	0.21	1.11	74	74	4	304	62.5	101.0
11	55.0	963.000	0.21	1.11	74	74	4	304	66.1	101.7
12	60.0	965.620	0.20	1.06	75	75	4	303	69.4	101.3
Average:			0.339	1.768	68.3	68.3	4.5	306.1		101.3

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 2

Date: 4-Feb-26
Run: 2 - Particulate / Metals
Run Time: 11:30 - 13:32

Concentrations:

Particulate	0.99 mg/dscm	0.00043 gr/dscf
	0.56 mg/Acm	0.00024 gr/Acf
	0.83 mg/dscm (@ 11% O2)	0.00036 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.062 Kg/hr	0.138 lb/hr
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Flue Gas Characteristics:

Flow	1048 dscm/min	36993 dscf/min
	17.46 dscm/sec	617 dscf/sec
	1870 Acn/min	66056 Acf/min

Velocity	12.240 m/sec	40.16 f/sec
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Temperature	152.1 oC	305.8 oF
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Moisture	16.7 %
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Gas Analysis	9.0 % O2
	10.5 % CO2

30.039 Mol. Wt (g/gmole) Dry
28.023 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.2627 dscm	79.909 dscf
Sample Time	120.0 minutes	
Isokineticity	102.0 %	

*** Standard Conditions:**

Metric:	20 deg C, 101.325 kPa
Imperial:	68 deg F, 29.92 in.Hg

Client:	Metro Vancouver	Date:	4-Feb-26
Jobsite:	WTE (Burnaby, B.C)	Run:	2 - Particulate / Metals
Source:	Unit 2	Run Time:	11:30 - 13:32

Control Unit (Y)	1.0137	Collection:	Gas Analysis (Vol. %):		Condensate Collection:	
Nozzle Diameter (in.)	0.3034		CO2	O2	Impinger 1	234.0
Pitot Factor	0.8347	Filter (grams) 0.00005	Traverse 1	9.13	Impinger 2	57.0
Baro. Press. (in. Hg)	30.26	Washings (grams) 0.00220			Traverse 2	10.5
Static Press. (in. H2O)	-14.5	Total (grams) 0.00225		8.83	Impinger 4	5.0
Stack Height (ft)	30				Impinger 5	2.0
Stack Diameter (in.)	70.90				Impinger 6	1.0
Stack Area (sq.ft.)	27.417				Gel	17.5
Minutes Per Reading	5.0		10.50	8.98	Gain (grams)	341.5
Minutes Per Point	5.0					

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ^P (in. H2O)	Orifice ^H (in. H2O)	Dry Gas Temperature Inlet (oF)	Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	966.000								
1	5.0	969.730	0.41	2.17	71	71	5	299	1.5	102.1
2	10.0	973.550	0.43	2.28	71	71	5	300	4.7	102.2
3	15.0	977.450	0.45	2.37	71	71	5	302	8.4	102.1
4	20.0	981.440	0.47	2.48	72	72	5	304	12.5	102.2
5	25.0	985.420	0.47	2.47	72	72	5	307	17.7	102.2
6	30.0	989.350	0.46	2.41	72	72	5	310	25.2	102.1
7	35.0	992.410	0.28	1.46	72	72	5	312	45.6	101.8
8	40.0	995.380	0.26	1.37	73	73	5	305	53.2	101.9
9	45.0	998.240	0.24	1.27	73	73	5	303	58.3	102.0
10	50.0	1001.050	0.23	1.22	74	74	4	300	62.5	101.9
11	55.0	1003.730	0.21	1.12	74	74	4	301	66.1	101.8
12	60.0	1006.350	0.20	1.16	74	74	4	300	69.4	101.9
Traverse 2	0.0	1006.350								
1	5.0	1009.280	0.25	1.33	74	74	5	300	1.5	102.0
2	10.0	1012.320	0.27	1.43	74	74	5	302	4.7	102.0
3	15.0	1015.350	0.27	1.42	75	75	5	310	8.4	102.0
4	20.0	1018.320	0.26	1.37	75	75	5	310	12.5	101.8
5	25.0	1021.230	0.25	1.32	75	75	5	310	17.7	101.7
6	30.0	1024.080	0.24	1.26	75	75	6	310	25.2	101.7
7	35.0	1027.720	0.39	2.05	76	76	6	310	45.6	101.9
8	40.0	1031.640	0.45	2.38	76	76	6	309	53.2	102.2
9	45.0	1035.640	0.47	2.48	76	76	6	309	58.3	102.0
10	50.0	1039.740	0.49	2.59	77	77	6	308	62.5	102.2
11	55.0	1043.660	0.45	2.38	77	77	6	309	66.1	102.0
12	60.0	1047.410	0.41	2.17	77	77	6	308	69.4	102.1
Average:			0.346	1.832	74.0	74.0	5.2	305.8		102.0

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 2

Date: 4-Feb-26
Run: 3 - Particulate / Metals
Run Time: 13:46 - 15:48

Concentrations:

Particulate	2.2 mg/dscm	0.0010 gr/dscf
	1.3 mg/Acm	0.0006 gr/Acf
	2.0 mg/dscm (@ 11% O2)	0.0009 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.14 Kg/hr	0.302 lb/hr
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Flue Gas Characteristics:

Flow	1050 dscm/min	37080 dscf/min
	17.50 dscm/sec	618 dscf/sec
	1804 Acm/min	63693 Acf/min

Velocity	11.802 m/sec	38.72 f/sec
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Temperature	154.8 oC	310.6 oF
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Moisture	12.9 %
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Gas Analysis	10.2 % O2
	10.0 % CO2

30.011 Mol. Wt (g/gmole) Dry
28.467 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.3450 dscm	82.813 dscf
Sample Time	120.0 minutes	
Isokineticity	99.3 %	

*** Standard Conditions:**

Metric:	20 deg C, 101.325 kPa
Imperial:	68 deg F, 29.92 in.Hg

Client:	Metro Vancouver	Date:	4-Feb-26
Jobsite:	WTE (Burnaby, B.C)	Run:	3 - Particulate / Metals
Source:	Unit 2	Run Time:	13:46 - 15:48

Control Unit (Y)	1.0137	Collection:		Gas Analysis (Vol. %):		Condensate Collection:			
Nozzle Diameter (in.)	0.3070		Filter (grams)	0.00030	CO2	O2	Impinger 1	178.0	
Pitot Factor	0.8492		Washings (grams)	0.00480	Traverse 1	10.2	10.1	Impinger 2	52.0
Baro. Press. (in. Hg)	30.28				Traverse 2	9.90	10.3	Impinger 3	11.0
Static Press. (in. H2O)	-15.00		Total (grams) 0.0051					Impinger 4	2.0
Stack Height (ft)	30						Impinger 5	1.0	
Stack Diameter (in.)	70.90						Impinger 6	1.0	
Stack Area (sq.ft.)	27.417						Gel	14.5	
Minutes Per Reading	5.0				10.03	10.18	Gain (grams)	259.5	
Minutes Per Point	5.0								

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ^P (in. H2O)	Orifice ^H (in. H2O)	Dry Gas Temperature Inlet (oF)	Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	48.012								
1	5.0	51.260	0.28	1.48	77	77	4	313	1.5	99.1
2	10.0	54.460	0.27	1.43	77	77	4	312	4.7	99.4
3	15.0	57.600	0.26	1.38	77	77	4	312	8.4	99.4
4	20.0	60.860	0.28	1.48	78	78	4	313	12.5	99.3
5	25.0	63.940	0.25	1.33	79	79	4	313	17.7	99.1
6	30.0	66.960	0.24	1.28	79	79	5	312	25.2	99.1
7	35.0	70.910	0.41	2.18	79	79	5	311	45.6	99.3
8	40.0	75.000	0.44	2.34	78	78	5	310	53.2	99.4
9	45.0	79.040	0.43	2.29	78	78	5	310	58.3	99.3
10	50.0	83.130	0.44	2.34	79	79	5	312	62.5	99.4
11	55.0	86.880	0.37	1.97	79	79	5	312	66.1	99.3
12	60.0	90.380	0.32	1.71	80	80	5	311	69.4	99.3
Traverse 2	0.0	90.380								
1	5.0	94.250	0.39	2.09	79	79	5	307	1.5	99.5
2	10.0	98.210	0.41	2.19	79	79	5	308	4.7	99.4
3	15.0	102.280	0.43	2.30	80	80	5	308	8.4	99.6
4	20.0	106.300	0.42	2.25	81	81	5	309	12.5	99.4
5	25.0	110.170	0.39	2.09	81	81	5	310	17.7	99.3
6	30.0	113.890	0.36	1.92	81	81	5	311	25.2	99.4
7	35.0	116.880	0.22	1.18	81	81	5	311	45.6	102.0
8	40.0	119.580	0.20	1.07	82	82	5	310	53.2	96.3
9	45.0	122.140	0.17	0.97	82	82	5	310	58.3	99.1
10	50.0	124.780	0.18	0.97	83	83	4	310	62.5	99.1
11	55.0	127.490	0.19	1.02	83	83	4	310	66.1	99.0
12	60.0	130.210	0.19	1.02	84	84	4	310	69.4	99.2
Average:			0.314	1.678	79.8	79.8	3.0	310.6		99.3

Client: Metro Vancouver
Jobsite: WTE (Burnaby,B.C)
Source: Unit 2

Sample Type: HF, HCl, NH₃

Parameter		Test 1	Test 2	Test 3
Test Date		4-Feb-25	4-Feb-25	4-Feb-25
Test Time		10:00 - 11:00	11:15 - 12:15	12:20 - 13:20
Test Duration	(min.)	60	60	60
Baro. Press.	(in. Hg)	30.26	30.26	30.26
DGM Factor	(Y)	1.0316	1.0215	1.0215
Initial Reading	(m ³)	242.808	284.665	284.797
Final Reading	(m ³)	242.917	284.796	284.919
Temp. Outlet	(Avg. oF)	62.5	62.0	64.0
Orifice Press.	(ΔH in.H ₂ O)	0.50	0.50	0.50
Gas Volume	(Sm ³)	0.11495	0.13737	0.12716
HF	(mg)	0.032	0.032	0.037
HCl	(mg)	1.850	4.431	7.741
NH ₃	(mg)	0.162	0.471	1.240
Oxygen	(Vol. %)	9.5	9.0	10.2
HF	(mg/Sm ³)	0.275	0.230	0.290
HF	(mg/Sm ³ @ 11% O ₂)	0.238	0.191	0.268
HCl	(mg/Sm ³)	16.1	32.3	60.9
HCl	(mg/Sm ³ @ 11% O ₂)	14.0	26.8	56.2
NH ₃	(mg/Sm ³)	1.41	3.43	9.75
NH ₃	(mg/Sm ³ @ 11% O ₂)	1.22	2.84	9.00
Moisture (isokinetic)	(Vol. %)	16.2	16.7	12.9

*Wet Basis Calculated on moisture from isokinetic tests
Tstd. (oF) 68

Psld. (in. Hg) 29.92

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C.)
Source: Unit 3

Date: 4-Feb-26
Run: 1 - Particulate / Metals
Run Time: 10:21 - 12:22

Concentrations:

Particulate	0.52 mg/dscm	0.00023 gr/dscf
	0.30 mg/Acm	0.00013 gr/Acf
	0.48 mg/dscm (@ 11% O2)	0.00021 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.039 Kg/hr	0.087 lb/hr
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Flue Gas Characteristics:

Flow	1263 dscm/min	44588 dscf/min
	21.04 dscm/sec	743 dscf/sec
	2204 Acm/min	77843 Acf/min

Velocity	14.423 m/sec	47.32 f/sec
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Temperature	152.4 oC	306.3 oF
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Moisture	13.9 %
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Gas Analysis	10.2 % O2
	9.4 % CO2

29.905 Mol. Wt (g/gmole) Dry
28.254 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.8927 dscm	102.157 dscf
Sample Time	120.0 minutes	
Isokineticity	101.8 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 3

Date: 4-Feb-26
Run: 1 - Particulate / Metals
Run Time: 10:21 - 12:22

Control Unit (Y)	0.9972	Collection:		Gas Analysis (Vol. %):		Condensate Collection:	
Nozzle Diameter (in.)	0.3070	Filter (grams)	0.00020	CO2	O2	Impinger 1	207.0
Pitot Factor	0.8492	Washings (grams)	0.00130	9.25	10.10	Impinger 2	98.0
Baro. Press. (in. Hg)	30.28			9.45	10.35	Impinger 3	29.0
Static Press. (in. H2O)	-19.00	Total (grams)	0.00150			Impinger 4	2.0
Stack Height (ft)	30					Impinger 5	0.0
Stack Diameter (in.)	70.90					Impinger 6	1.0
Stack Area (sq.ft.)	27.417					Gel	12.5
Minutes Per Reading	5.0			9.35	10.23	Gain (grams)	349.5
Minutes Per Point	5.0						

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ΔP (in. H2O)	Orifice ΔH (in. H2O)	Dry Gas Temperature Inlet (oF)	Dry Gas Temperature Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	143.245								
1	5.0	146.710	0.31	1.66	68	68	4	307	1.5	101.5
2	10.0	150.120	0.30	1.60	68	68	4	307	4.7	101.6
3	15.0	153.760	0.34	1.82	69	69	4	307	8.4	101.7
4	20.0	157.510	0.36	1.93	69	69	4	306	12.5	101.8
5	25.0	161.160	0.34	1.83	70	70	4	306	17.7	101.7
6	30.0	164.960	0.37	1.99	70	70	5	305	25.2	101.5
7	35.0	169.390	0.50	2.69	70	70	5	305	45.6	102.0
8	40.0	173.870	0.51	2.75	71	71	5	305	53.2	101.9
9	45.0	178.480	0.54	2.91	71	71	5	306	58.3	102.0
10	50.0	183.190	0.56	3.02	73	73	6	307	62.5	102.1
11	55.0	187.630	0.50	2.70	73	73	6	307	66.1	101.7
12	60.0	192.080	0.50	2.70	74	74	6	307	69.4	101.8
Traverse 2	0.0	192.080								
1	5.0	196.580	0.51	2.76	74	74	6	307	1.5	101.9
2	10.0	201.130	0.52	2.82	75	75	6	307	4.7	101.9
3	15.0	205.820	0.55	2.99	76	76	6	306	8.4	101.9
4	20.0	210.590	0.57	3.10	76	76	6	306	12.5	101.8
5	25.0	215.550	0.61	3.33	78	78	6	306	17.7	102.0
6	30.0	220.430	0.59	3.22	78	78	7	306	25.2	102.1
7	35.0	224.350	0.38	2.07	79	79	7	307	45.6	101.7
8	40.0	228.620	0.45	2.46	80	80	7	307	53.2	101.7
9	45.0	232.950	0.46	2.52	81	81	5	307	58.3	101.9
10	50.0	237.190	0.44	2.42	82	82	5	306	62.5	101.7
11	55.0	241.330	0.42	2.31	82	82	5	306	66.1	101.6
12	60.0	245.120	0.35	1.93	83	83	4	305	69.4	101.6
Average:			0.458	2.480	74.6	74.6	5.3	306.3		101.8

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C.)
Source: Unit 3

Date: 5-Feb-26
Run: 2 - Particulate / Metals
Run Time: 09:32 - 11:33

Concentrations:

Particulate	1.11 mg/dscm	0.00049 gr/dscf
	0.62 mg/Acm	0.00027 gr/Acf
	1.02 mg/dscm (@ 11% O2)	0.00044 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.081 Kg/hr	0.178 lb/hr
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Flue Gas Characteristics:

Flow	1213 dscm/min	42840 dscf/min
	20.22 dscm/sec	714 dscf/sec
	2165 Acm/min	76472 Acf/min

Velocity	14.169 m/sec	46.49 f/sec
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Temperature	153.4 oC	308.2 oF
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Moisture	15.1 %
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Gas Analysis	10.1 % O2
	9.9 % CO2

29.992 Mol. Wt (g/gmole) Dry
28.184 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.7915 dscm	98.581 dscf
Sample Time	120.0 minutes	
Isokineticity	102.2 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE (Burnaby, B.C)
Source: Unit 3

Date: 5-Feb-26
Run: 2 - Particulate / Metals
Run Time: 09:32 - 11:33

Control Unit (Y) 0.9972
 Nozzle Diameter (in.) 0.3070
 Pitot Factor 0.8492
 Baro. Press. (in. Hg) 30.12
 Static Press. (in. H2O) -19.00
 Stack Height (ft) 30
 Stack Diameter (in.) 70.90
 Stack Area (sq.ft.) 27.417
 Minutes Per Reading 5.0
 Minutes Per Point 5.0

Collection:
 Filter (grams) 0.00020
 Washings (grams) 0.00290
Total (grams) 0.00310

Gas Analysis (Vol. %):

CO2	O2
10.00	10.15
9.85	10.05

Condensate Collection:

Impinger 1	235.0
Impinger 2	89.0
Impinger 3	32.0
Impinger 4	2.0
Impinger 5	0.0
Impinger 6	0.0
Gel	14.0

9.93 10.10

Gain (grams) 372.0

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ΔP (in. H2O)	Orifice ΔH (in. H2O)	Dry Gas Temperature Inlet (oF)	Dry Gas Temperature Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	245.850								
1	5.0	249.330	0.31	1.66	68	68	4	307	1.5	103.1
2	10.0	252.750	0.30	1.60	68	68	4	307	4.7	102.9
3	15.0	256.390	0.34	1.82	68	68	4	307	8.4	103.0
4	20.0	260.150	0.36	1.93	69	69	4	306	12.5	103.1
5	25.0	263.800	0.34	1.82	69	69	5	306	17.7	103.0
6	30.0	267.500	0.35	1.87	69	69	5	308	25.2	103.0
7	35.0	271.930	0.50	2.67	70	70	5	309	45.6	103.3
8	40.0	276.400	0.51	2.72	70	70	6	310	53.2	103.3
9	45.0	280.920	0.52	2.78	71	71	6	310	58.3	103.2
10	50.0	285.520	0.54	2.89	71	71	5	311	62.5	103.2
11	55.0	289.950	0.50	2.67	71	71	5	311	66.1	103.2
12	60.0	294.370	0.50	2.67	71	71	5	312	69.4	103.1
Traverse 2	0.0	294.370								
1	5.0	298.820	0.50	2.70	72	72	6	306	1.5	103.2
2	10.0	303.420	0.53	2.86	74	74	6	307	4.7	103.3
3	15.0	308.190	0.57	3.03	74	74	6	307	8.4	103.3
4	20.0	313.160	0.62	3.35	75	75	6	309	12.5	103.3
5	25.0	317.970	0.58	3.14	75	75	7	308	17.7	103.2
6	30.0	322.460	0.50	2.71	77	77	7	308	25.2	103.3
7	35.0	326.420	0.39	2.12	77	77	7	308	45.6	103.0
8	40.0	329.840	0.29	1.58	78	78	7	308	53.2	102.8
9	45.0	332.690	0.33	1.79	78	78	6	308	58.3	80.4
10	50.0	336.500	0.36	1.96	78	78	4	308	62.5	102.9
11	55.0	340.420	0.38	2.07	78	78	4	308	66.1	103.1
12	60.0	344.400	0.39	2.12	79	79	4	308	69.4	103.1
Average:			0.438	2.355	72.9	72.9	5.3	308.2		102.2

Client: Metro Vancouver
Jobsite: WTE(Burnaby,B.C)
Source: Unit 3

Date: 5-Feb-26
Run: 3 - Particulate / Metals
Run Time: 11:43 - 13:45

Concentrations:

Particulate	0.05 mg/dscm	0.00002 gr/dscf
	0.03 mg/Acm	0.00001 gr/Acf
	0.05 mg/dscm (@ 11% O2)	0.00002 gr/dscf (@ 11% O2)

Emission Rates:

Particulate	0.004 Kg/hr	0.009 lb/hr
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Flue Gas Characteristics:

Flow	1217 dscm/min	42991 dscf/min
	20.29 dscm/sec	717 dscf/sec
	2138 Acn/min	75497 Acf/min

Velocity	13.989 m/sec	45.89 f/sec
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Temperature	151.4 oC	304.5 oF
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Moisture	14.1 %
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Gas Analysis	9.8 % O2
	9.3 % CO2

29.871 Mol. Wt (g/gmole) Dry
28.197 Mol. Wt (g/gmole) Wet

Sample Parameters:

Sample Volume	2.7892 dscm	98.501 dscf
Sample Time	120.0 minutes	
Isokineticity	101.8 %	

*** Standard Conditions:** Metric: 20 deg C, 101.325 kPa
Imperial: 68 deg F, 29.92 in.Hg

Client: Metro Vancouver
Jobsite: WTE(Burnaby,B.C)
Source: Unit 3

Date: 5-Feb-26
Run: 3 - Particulate / Metals
Run Time: 11:43 - 13:45

Control Unit (Y)	0.9972	Collection:	Gas Analysis (Vol. %):	Condensate Collection:
Nozzle Diameter (in.)	0.3070	Filter (grams) 0.00005	CO2 O2	Impinger 1 237.0
Pitot Factor	0.8492	Washings (grams) 0.00010	Traverse 1 8.85 9.50	Impinger 2 72.0
Baro. Press. (in. Hg)	30.12		Traverse 2 9.65 10.1	Impinger 3 22.0
Static Press. (in. H2O)	-19.00	Total (grams) 0.00015		Impinger 4 0.0
Stack Height (ft)	30			Impinger 5 0.0
Stack Diameter (in.)	70.90			Impinger 6 0.0
Stack Area (sq.ft.)	27.417			Gel 12.5
Minutes Per Reading	5.0		9.25 9.78	Gain (grams) 343.5
Minutes Per Point	5.0			

Traverse / Point	Time (min.)	Dry Gas Meter (ft3)	Pitot ^P (in. H2O)	Orifice ^H (in. H2O)	Dry Gas Temperature Inlet (oF)	Dry Gas Temperature Outlet (oF)	Vacuum (in. Hg.)	Stack Temp. (oF)	Wall Dist. (in.)	Isokin. (%)
Traverse 1	0.0	345.265								
1	5.0	348.810	0.32	1.72	71	71	4	308	1.5	101.7
2	10.0	352.320	0.31	1.68	71	71	4	300	4.7	101.7
3	15.0	356.010	0.34	1.85	73	73	4	300	8.4	101.8
4	20.0	359.800	0.36	1.95	73	73	5	302	12.5	101.8
5	25.0	363.490	0.34	1.85	74	74	5	302	17.7	101.7
6	30.0	367.250	0.35	1.91	76	76	5	303	25.2	101.9
7	35.0	371.750	0.50	2.73	77	77	6	303	45.6	102.0
8	40.0	376.290	0.51	2.78	77	77	6	304	53.2	102.0
9	45.0	380.880	0.52	2.84	77	77	6	304	58.3	102.1
10	50.0	385.560	0.54	2.95	78	78	7	304	62.5	102.0
11	55.0	390.020	0.49	2.67	78	78	7	305	66.1	102.1
12	60.0	394.390	0.47	2.57	79	79	6	305	69.4	101.9
Traverse 2	0.0	394.390								
1	5.0	398.880	0.49	2.69	81	81	6	304	1.5	102.1
2	10.0	403.460	0.51	2.80	81	81	6	304	4.7	102.1
3	15.0	408.130	0.53	2.91	82	82	6	305	8.4	102.1
4	20.0	413.020	0.58	3.19	82	82	6	305	12.5	102.2
5	25.0	417.520	0.49	2.70	83	83	5	306	17.7	102.1
6	30.0	421.920	0.47	2.59	83	83	5	306	25.2	101.9
7	35.0	426.030	0.43	2.26	83	83	5	306	45.6	99.4
8	40.0	429.720	0.33	1.82	84	84	4	307	53.2	101.7
9	45.0	433.360	0.32	1.76	84	84	4	308	58.3	101.9
10	50.0	437.120	0.34	1.88	85	85	4	307	62.5	101.9
11	55.0	440.990	0.36	1.99	85	85	4	305	66.1	101.8
12	60.0	444.910	0.37	2.05	85	85	4	305	69.4	101.7
Average:			0.428	2.339	79.3	79.3	5.2	304.5		101.8

Client: Metro Vancouver
Jobsite: WTE (Burnaby,B.C)
Source: Unit 3

Sample Type: HF, HCl, NH ₃				
Parameter		Test 1	Test 2	Test 3
Test Date		5-Feb-26	5-Feb-26	5-Feb-26
Test Time		10:45 - 11:45	11:55 - 12:55	13:05 - 14:05
Test Duration	(min.)	60	60	60
Baro. Press.	(in. Hg)	30.05	30.05	30.05
DGM Factor	(Y)	1.0215	1.0215	1.0215
Initial Reading	(m ³)	284.921	285.053	285.177
Final Reading	(m ³)	285.052	285.175	285.299
Temp. Outlet	(Avg. oF)	55.5	63.5	66.5
Orifice Press.	(ΔH in.H ₂ O)	0.30	0.30	0.30
Gas Volume	(Sm ³)	0.13776	0.12654	0.12561
HF	(mg)	0.036	0.036	0.036
HCl	(mg)	2.529	5.952	2.560
NH ₃	(mg)	2.164	0.404	0.847
Oxygen	(Vol. %)	10.2	10.1	9.8
HF	(mg/Sm ³)	0.261	0.284	0.287
HF	(mg/Sm ³ @ 11% O ₂)	0.242	0.261	0.255
HCl	(mg/Sm ³)	18.4	47.0	20.4
HCl	(mg/Sm ³ @ 11% O ₂)	17.0	43.1	18.1
NH ₃	(mg/Sm ³)	15.7	3.19	6.75
NH ₃	(mg/Sm ³ @ 11% O ₂)	14.6	2.92	6.00
Moisture (isokinetic)	(Vol. %)	13.9	15.1	14.1

*Wet Basis Calculated on moisture from isokinetic tests
Tstd. (oF) 68

Psld. (in. Hg) 29.92

Client: Metro Vancouver
Jobsite: WTE (Burnaby,B.C)

Parameter: N₂O

Molecular Weight: 44.00 grams/mol **Reportable Detection**
Lab Detection Limit: 0.1 ppm **Limit:** 0.18 mg/Sm³

Sample ID	Date	Time	N ₂ O ppm	N ₂ O mg/Sm ³	N ₂ O mg/Sm ³ @ 11% O ₂
Unit 1 - Run 1	6-Mar-26	10:40 - 11:40	3.20	5.86	5.10
Unit 1 - Run 2	6-Mar-26	11:53 - 12:53	3.80	6.95	6.00
Unit 1 - Run 3	6-Mar-26	13:03 - 14:03	3.00	5.49	5.11
Average					5.40
Unit 2 - Run 1	4-Feb-26	10:00 - 11:00	7.30	13.36	11.60
Unit 2 - Run 2	4-Feb-26	11:15 - 12:15	9.00	16.47	13.69
Unit 2 - Run 3	4-Feb-26	12:20 - 13:20	9.10	16.66	15.39
Average					13.56
Unit 3 - Run 1	5-Feb-26	10:45 - 11:45	4.20	7.69	7.14
Unit 3 - Run 2	5-Feb-26	11:55 - 12:55	3.40	6.22	5.71
Unit 3 - Run 3	5-Feb-26	13:05 - 14:05	3.10	5.67	5.21
Average					6.02

Date:	6-Mar-26			4-Feb-26			5-Feb-26		
	Unit 1			Unit 2			Unit 3		
	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3
Test Times:	09:44 - 10:44	10:58 - 11:58	12:10 - 11:10	09:23 - 10:23	10:39 - 11:39	11:55 - 12:55	09:27 - 10:27	10:40 - 11:40	11:51 - 12:51
Methane (ppmv)	ND	ND	ND	4.9	ND	4.8	ND	4.8	5.4
Ethane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethene (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
C3 as Propane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
C4 as n-Butane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
C5 as n-Pentane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
C6 as n-Hexane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND
C6+ as n-Hexane (ppmv)	ND	ND	ND	ND	ND	ND	ND	ND	ND

Detection Limits:

Methane	3.6	4.2	2.8	3.6	7.0	3	3.2	3.8	4.1
Ethane	1.10	1.3	0.83	1.1	2.10	0.89	0.95	1.1	1.20
Ethene	1.10	1.3	0.83	1.1	2.10	0.89	0.95	1.1	1.20
C3 as Propane	1.80	2.1	1.4	1.8	3.5	1.50	1.60	1.9	1.0
C4 as n-Butane	1.80	2.1	1.4	1.8	3.5	1.50	1.60	1.9	1.0
C5 as n-Pentane	1.80	2.1	1.4	1.8	3.5	1.50	1.60	1.9	1.0
C6 as n-Hexane	11.00	13	8.3	11	21	8.90	9.50	11	6.0
C6+	1.8	2.1	1.4	1.8	3.5	1.5	1.6	1.9	1.0

Using 1/2 DL Convention

Sample Date:	6-Mar-26			4-Feb-26			5-Feb-26		
	Unit 1			Unit 2			Unit 3		
	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3	Run 1	Run 2	Run 3
Test Times:	09:44 - 10:44	10:58 - 11:58	12:10 - 11:10	09:23 - 10:23	10:39 - 11:39	11:55 - 12:55	09:27 - 10:27	10:40 - 11:40	11:51 - 12:51
Methane (ppm)	1.80	2.10	1.40	4.90	3.50	4.80	1.60	4.80	5.40
Ethane (ppm)	0.55	0.65	0.42	0.55	1.05	0.45	0.48	0.55	0.60
Ethene (ppm)	0.55	0.65	0.42	0.55	1.05	0.45	0.48	0.55	0.60
C3 as Propane (ppm)	0.90	1.05	0.70	0.90	1.75	0.75	0.80	0.95	0.50
C4 as n-Butane (ppm)	0.90	1.05	0.70	0.90	1.75	0.75	0.80	0.95	0.50
C5 as n-Pentane (ppm)	0.90	1.05	0.70	0.90	1.75	0.75	0.80	0.95	0.50
C6 as n-Hexane (ppm)	5.50	6.50	4.15	5.50	10.50	4.45	4.75	5.50	3.00
C6+ as n-Hexane (ppm)	0.90	1.05	0.70	0.90	1.75	0.75	0.80	0.95	0.50

Methane (mg/m³ as CH₄)	1.20	1.40	0.93	3.27	2.34	3.20	1.07	3.20	3.60
Ethane (mg/m³ as CH₄)	0.37	0.43	0.28	0.37	0.70	0.30	0.32	0.37	0.40
Ethene (mg/m³ as CH₄)	0.37	0.43	0.28	0.37	0.70	0.30	0.32	0.37	0.40
C3 as Propane (mg/m³ as CH₄)	0.60	0.70	0.47	0.60	1.17	0.50	0.53	0.63	0.33
C4 as n-Butane (mg/m³ as CH₄)	0.60	0.70	0.47	0.60	1.17	0.50	0.53	0.63	0.33
C5 as n-Pentane (mg/m³ as CH₄)	0.60	0.70	0.47	0.60	1.17	0.50	0.53	0.63	0.33
C6 as n-Hexane (mg/m³ as CH₄)	3.67	4.34	2.77	3.67	7.01	2.97	3.17	3.67	2.00
C6+ as n-Hexane (mg/m³ as CH₄)	0.60	0.70	0.47	0.60	1.17	0.50	0.53	0.63	0.33

Total mg/Sm³ @11% O₂ as CH₄	6.15	6.75	4.40	7.75	12.38	6.34	4.54	7.38	5.80
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All data is corrected to standard conditions (S) of 20 °C, 101.325 kPa (dry) unless otherwise noted.

APPENDIX - E

FIELD DATA SHEETS

METRO VANCOUVER WTE - BURNABY B.C.					NOZZLE		DIAMETER, IN.		IMPINGER		INITIAL		FINAL		TOTAL GAIN		
					PROBE		Cp		VOLUMES		(mL)		(mL)		(mL)		
SOURCE Unit #1					PORT LENGTH					Imp. #1		0		235		235	
PARAMETER / RUN No Metals + Particulate / R-1					STATIC PRESSURE, IN. H2O -18.5"					Imp. #2		100		74		74	
DATE MARCH 5 2026					STACK DIAMETER 70.9"					Imp. #3		100		23		23	
OPERATOR: DS + JB					STACK HEIGHT 30.0'					Imp. #4		0		2		2	
CONTROL UNIT CAE AL-1 Y 0.9604					INITIAL LEAK TEST 0.002 @ 15"					Imp. #5		100		100		0	
					FINAL LEAK TEST 0.002 @ 15"					Imp. #6		100		100		0	
BAROMETRIC PRESSURE, IN. Hg 30.03										Imp. #7		100		100		0	
ASSUMED MOISTURE, Bw 14%										Imp. #8		100		100		0	
																Tests #3	
Point	Clock Time	Dry Gas Meter ft ³	Pitot ΔP IN. H ₂ O	Orifice ΔH IN. H ₂ O	Temperature °F					Pump Vac. IN. Hg	Fyrites						
					Dry Gas Outlet	Stack	Probe	Box	Impinger Exit		CO ₂ Vol. %	O ₂ Vol. %					
1	11:12	558.827															
2	10	561.98	0.28	1.40	56	296	238	250	45	3	10.5	9.17					
3		565.44	0.30	1.50	57	298											
4	20	569.02	0.32	1.60	57	298	240	252	44	3							
5		572.71	0.34	1.70	58	299											
6	30	576.56	0.37	1.85	58	300	253	257	45	3.5							
7		580.32	0.35	1.75	59	301					10.5	9.56					
8	40	584.33	0.40	2.01	60	301	253	254	46	3.5							
9		588.70	0.37	1.85	60	302											
10	50	591.96	0.35	1.76	60	300	254	256	48	3.5							
11		595.68	0.34	1.71	61	299					9.5	10.22					
12	60	599.33	0.33	1.65	61	302	254	254	49	4							
		602.82	0.30	1.51	61	298											
1		606.64	0.36	1.81	62	303	254	253	50	4	10.5	9.3					
2	10	610.58	0.38	1.91	63	304											
3		614.56	0.39	1.96	63	305	254	254	52	4							
4	20	618.69	0.42	2.11	63	304											
5		622.98	0.45	2.27	64	303	253	252	46	4	10.5	9.39					
6	30	627.32	0.46	2.32	64	303											
7		631.46	0.42	2.12	64	302	253	258	44	4							
8	40	635.46	0.39	1.97	65	303											
9		639.32	0.36	1.82	66	302	254	256	45	4	10.5	9.43					
10	50	642.72	0.32	1.62	65	303											
11		646.43	0.30	1.52	66	302	256	252	46	4							
12	13:13	649.88	0.29	1.48	66	299											

METRO VANCOUVER WTE - BURNABY B.C.					NOZZLE PROBE	G-304 FIC	DIAMETER, IN. Cp	0.3034 0.8492	IMPINGER VOLUMES	INITIAL (mL)	FINAL (mL)	TOTAL GAIN (mL)
SOURCE	Unit #1				PORT LENGTH							
PARAMETER / RUN No	metals-particulate / R-2				STATIC PRESSURE, IN. H ₂ O	-18.5"						
DATE	MARCH 6, 2026				STACK DIAMETER	70.9'						
OPERATOR:	DS + SD + JG				STACK HEIGHT	30.0'						
CONTROL UNIT	CAF AL-1											
	Y 0.9604 ΔH@ 1.811											
BAROMETRIC PRESSURE, IN. Hg	30.01				INITIAL LEAK TEST	0.002 @ 15"						
ASSUMED MOISTURE, Bw	15%				FINAL LEAK TEST	0.002 @ 15"						

METRO VANCOUVER WTE - BURNABY B.C.					NOZZLE	DIAMETER, IN.		IMPINGER	INITIAL	FINAL	TOTAL GAIN	
SOURCE					PROBE	Cp		VOLUMES	(mL)	(mL)	(mL)	
PARAMETER / RUN No					PORT LENGTH					Imp. #1		
DATE					STATIC PRESSURE, IN. H2O					Imp. #2		
OPERATOR:					STACK DIAMETER					Imp. #3		
CONTROL UNIT					STACK HEIGHT					Imp. #4		
BAROMETRIC PRESSURE, IN. Hg					INITIAL LEAK TEST					Imp. #5		
ASSUMED MOISTURE, Bw					FINAL LEAK TEST					Imp. #6		
										Imp. #7		
										Imp. #8		
										Imp. #9		
										Imp. #10		
										Imp. #11		
										Imp. #12		
										Imp. #13		
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										Imp. #329		
										Imp. #330		
										Imp. #331		
										Imp. #332		

A. Lanfranco and Associates Inc.

Client MU WTE Y LMU-C 1.0203
 Source Unit #1 Cp _____
 Parameter HCL, HF, NH₃ Pbar 30.29 Static _____
 Date 16 March 96 Operator SLG SK

Leak Check	Run 1	Run 2	Run 3
Initial	<u>1.0001</u>	<u>1.0001</u>	<u>1.0001</u>
Final	<u>1.0001</u>	<u>1.0001</u>	<u>1.0001</u>

Client _____ Y _____
 Source _____ Cp _____
 Parameter _____ Pbar _____ Static _____
 Date _____ Operator _____

Leak Check	Run 1	Run 2	Run 3
Initial			
Final			

Test No.	Time (hhmm)	DGM Volume (cu ft) / (m ³)	Temperature (°F)		Imp. Vol. (mL)	ΔP IN. H ₂ O		
			DGM Outlet	Stack		R1	R2	R3
1	<u>9:40</u>	<u>199.4964</u>	<u>49</u>					
	<u>10:40</u>	<u>199.6454</u>	<u>52</u>					
2	<u>10:53</u>	<u>199.6462</u>	<u>49</u>					
	<u>11:53</u>	<u>199.7932</u>	<u>52</u>					
3	<u>12:03</u>	<u>199.7964</u>	<u>50</u>					
	<u>13:03</u>	<u>199.9719</u>	<u>53</u>					

Test No.	Time (hhmm)	DGM Volume (cu ft) / (m ³)	Temperature (°F)		Imp. Vol. (mL)	ΔP IN. H ₂ O		
			DGM Outlet	Stack		R1	R2	R3
1								
2								
3								

A. Lanfranco and Associates Inc.

Client MU WTE

Source Unit #1

Date 6 March 26

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)	30.29	50.29	30.29		
Canister Number	5C02336	5C01766	5C01785		
Controller Number	0A00970	0A00878	0A02323		
Gauge Number					
Initial: Start Time	9:40	10:53	12:03		
Flask Vac. (in. Hg)	-29	-28	-27		
Final: End Time	10:40	11:53	13:03		
Flask Vac. (in. Hg)	-10	-8	-5		

Source _____

Date _____

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number					
Controller Number					
Gauge Number					
Initial: Start Time					
Flask Vac. (in. Hg)					
Final: End Time					
Flask Vac. (in. Hg)					

Source _____

Date _____

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number					
Controller Number					
Gauge Number					
Initial: Start Time					
Flask Vac. (in. Hg)					
Final: End Time					
Flask Vac. (in. Hg)					

Source _____

Date _____

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number					
Controller Number					
Gauge Number					
Initial: Start Time					
Flask Vac. (in. Hg)					
Final: End Time					
Flask Vac. (in. Hg)					

CLIENT: MV WTE					NOZZLE G-304 DIAMETER, IN. 0.3034					IMPINGER		INITIAL	FINAL	TOTAL GAIN
SOURCE: Unit 2					PROBE ZAL GVRD-1 Cp 0.8347					VOLUMES		(mL)	(mL)	(mL)
PARAMETER / RUN No PM/ Metals Run 1					PORT LENGTH					Imp. #1		0	193	
DATE 4 Feb 2026					STATIC PRESSURE, IN. H2O -14.5					Imp. #2		100	223	
OPERATOR: LA LF BR					STACK DIAMETER 70.90"					Imp. #3		100	194	
CONTROL UNIT JCU14 Y 1.0137					STACK HEIGHT 30'					Imp. #4		0	2	
$\Delta H @$ 2.049										Imp. #5		100	101	
BAROMETRIC PRESSURE, IN. Hg 30.26					INITIAL LEAK TEST 0.001 @ 15"					Imp. #6		100	101	
ASSUMED MOISTURE, Bw 17%					FINAL LEAK TEST 0.001 @ 15"					Upstream Diameters				
										Downstream Diameters				
										Pump Vac.		Fyrites		
Sm./Point	Clock Time	Dry Gas Meter ft ³	Pitot ΔP IN. H ₂ O	Orifice ΔH IN. H ₂ O	Temperature °F					IN. Hg	CO ₂ Vol. %	O ₂ Vol. %		
	0856	886.082			Dry Gas Outlet	Stack	Probe	Box	Impinger Exit					
1		888.88	0.24	1.25	60	249	249	253	62	4				
2		891.83	0.27	1.39	62	310					8.5	11.0		
3		894.67	0.25	1.28	62	311	250	284	61	4				
4		897.56	0.26	1.33	62	312								
5		900.34	0.24	1.23	62	310	251	255	59	4				
6		903.07	0.23	1.18	63	309					8.7	10.8		
7		906.59	0.38	1.96	64	308	250	256	58	5				
8		910.43	0.45	2.33	65	307								
9		914.37	0.47	2.44	66	306	249	255	58	5				
10		918.48	0.51	2.66	67	305					11.0	8.5		
11		922.31	0.44	2.30	68	304	250	255	57	5				
12		925.97	0.40	2.11	69	301								
1		929.58	0.39	2.05	69	303	251	256	58	5				
2		933.37	0.43	2.25	70	306					10.9	8.6		
3		937.21	0.44	2.31	71	307	252	255	59	5				
4		941.00	0.43	2.25	71	307								
5		944.93	0.46	2.41	72	309	251	256	58	5				
6		948.91	0.47	2.47	73	308					10.5	8.9		
7		951.93	0.27	1.42	73	306	250	257	55	4.5				
8		954.84	0.25	1.32	73	306								
9		957.64	0.23	1.22	74	305	251	256	53	4.0				
10		960.31	0.21	1.11	74	304					10.5	9.1		
11		963.00	0.21	1.11	74	304	252	255	51	4.0				
12	1058	963.62	0.20	1.06	75	303								

Client MV WTE Y LM-4 1.0215
 Source Unit #2 Cp LM-5 1.0316
 Parameter HF + NH₃ Pbar 30.26 Static
 Date Feb 4, 2026 Operator LF + BB
 Stack Dia _____ Down _____ Up _____

Leak Check	Run 1	Run 2	Run 3
Initial	0.0001	0.0001	0.0001
Final	0.0001	0.0001	0.001

Test No.	Time (hhmm)	DGM Volume (cu ft) / (m ³)	Temperature (°F)		Imp. Vol. (mL)	ΔP IN. H ₂ O		
			DGM Outlet	Stack		R1	R2	R3
1	10:00	242.8078	57		100			
	11:00	242.9167	68					
2	11:15	284.6645	62					
	12:15	284.7958	62					
3	12:20	284.7972	65					
	13:20	284.9192	63					

Client MV WTE Y LM-4 1.0215
 Source Unit #3 Cp _____
 Parameter HF + NH₃ Pbar 30.05 Static
 Date Feb 5/2026 Operator LF + BB
 Stack Dia _____ Down _____ Up _____

Leak Check	Run 1	Run 2	Run 3
Initial	0.0001	0.0001	0.0001
Final	0.0001	0.0001	0.0001

Test No.	Time (hhmm)	DGM Volume (cu ft) / (m ³)	Temperature (°F)		Imp. Vol. (mL)	ΔP IN. H ₂ O		
			DGM Outlet	Stack		R1	R2	R3
1	10:45	284.9208	49					
	11:45	285.0518	62					
2	11:55	285.0530	58					
	12:55	285.1752	69					
3	13:05	285.1768	62					
	14:05	285.2988	71					

CLIENT: <u>MV</u>				NOZZLE <u>P307</u>		DIAMETER, IN. <u>3070</u>		IMPINGER		INITIAL	FINAL	TOTAL GAIN		
SOURCE: <u>0.1 + #3</u>				PROBE <u>7C</u>		Cp <u>18492</u>		VOLUMES	(mL)	(mL)	(mL)			
PARAMETER / RUN No <u>partic/metals R2</u>				PORT LENGTH				Imp. #1	<u>0</u>	<u>235</u>				
DATE <u>5/6/26</u>				STATIC PRESSURE, IN. H2O <u>-19.0</u>				Imp. #2	<u>100</u>	<u>159</u>				
OPERATOR: <u>SL+LF</u>				STACK DIAMETER <u>70.9</u>				Imp. #3	<u>100</u>	<u>152</u>				
CONTROL UNIT <u>An 15</u>				STACK HEIGHT <u>30</u>				Imp. #4	<u>0</u>	<u>700</u>				
Y <u>.9972</u>								Imp. #5	<u>100</u>	<u>100</u>				
ΔH@ <u>1.684</u>								Imp. #6	<u>100</u>	<u>100</u>				
BAROMETRIC PRESSURE, IN. Hg <u>30.12</u>				INITIAL LEAK TEST <u>0.010154</u>				Upstream Diameters						
ASSUMED MOISTURE, Bw <u>15%</u>				FINAL LEAK TEST <u>0.010154</u>				Downstream Diameters						
								<u>test #2</u>						
Point	Clock Time	Dry Gas Meter ft ³	Pitot ΔP IN. H ₂ O	Orifice ΔH IN. H ₂ O	Temperature °F					Pump Vac. IN. Hg	Fyrites			
					Dry Gas Outlet	Stack	Probe	Box	Impinger Exit		CO ₂ Vol. %	O ₂ Vol. %		
1	<u>9:32</u>	<u>249.33</u>	<u>1.31</u>	<u>1.66</u>	<u>68</u>	<u>307</u>	<u>250</u>	<u>257</u>	<u>59</u>	<u>4.0</u>				
2		<u>257.75</u>	<u>1.30</u>	<u>1.60</u>	<u>68</u>	<u>307</u>					<u>10.0</u>	<u>10.0</u>		
3		<u>256.39</u>	<u>1.34</u>	<u>1.52</u>	<u>68</u>	<u>307</u>	<u>257</u>	<u>257</u>	<u>59</u>	<u>4.0</u>				
4		<u>260.15</u>	<u>1.36</u>	<u>1.53</u>	<u>69</u>	<u>306</u>								
5		<u>263.80</u>	<u>1.34</u>	<u>1.52</u>	<u>69</u>	<u>306</u>	<u>252</u>	<u>257</u>	<u>59</u>	<u>4.2</u>				
6		<u>267.50</u>	<u>1.35</u>	<u>1.87</u>	<u>69</u>	<u>308</u>								
7		<u>271.93</u>	<u>1.50</u>	<u>2.67</u>	<u>70</u>	<u>309</u>	<u>250</u>	<u>252</u>	<u>58</u>	<u>5.5</u>				
8		<u>276.40</u>	<u>1.51</u>	<u>2.72</u>	<u>70</u>	<u>310</u>								
9		<u>280.92</u>	<u>1.52</u>	<u>2.75</u>	<u>71</u>	<u>310</u>	<u>249</u>	<u>257</u>	<u>58</u>	<u>5.5</u>				
10		<u>285.52</u>	<u>1.54</u>	<u>2.59</u>	<u>71</u>	<u>311</u>								
11		<u>289.95</u>	<u>1.50</u>	<u>2.67</u>	<u>71</u>	<u>311</u>	<u>248</u>	<u>252</u>	<u>58</u>	<u>5.0</u>	<u>10.0</u>	<u>10.3</u>		
12		<u>294.37</u>	<u>1.50</u>	<u>2.67</u>	<u>71</u>	<u>312</u>								
1	<u>11:33</u>	<u>299.82</u>	<u>1.50</u>	<u>2.70</u>	<u>72</u>	<u>306</u>	<u>257</u>	<u>252</u>	<u>58</u>	<u>7.5</u>				
2		<u>303.42</u>	<u>1.53</u>	<u>2.86</u>	<u>74</u>	<u>307</u>								
3		<u>308.19</u>	<u>1.57</u>	<u>3.03</u>	<u>74</u>	<u>307</u>	<u>250</u>	<u>251</u>	<u>58</u>	<u>8.0</u>	<u>9.8</u>	<u>10.1</u>		
4		<u>313.16</u>	<u>1.62</u>	<u>3.35</u>	<u>75</u>	<u>309</u>								
5		<u>317.07</u>	<u>1.58</u>	<u>3.14</u>	<u>75</u>	<u>308</u>	<u>250</u>	<u>250</u>	<u>58</u>	<u>8.0</u>				
6		<u>322.46</u>	<u>1.50</u>	<u>2.71</u>	<u>77</u>	<u>308</u>								
7		<u>326.42</u>	<u>1.39</u>	<u>2.12</u>	<u>77</u>	<u>308</u>	<u>250</u>	<u>249</u>	<u>58</u>	<u>7.0</u>				
8		<u>329.84</u>	<u>1.29</u>	<u>1.58</u>	<u>78</u>	<u>308</u>								
9		<u>332.69</u>	<u>1.33</u>	<u>1.79</u>	<u>78</u>	<u>308</u>	<u>257</u>	<u>250</u>	<u>58</u>	<u>4.5</u>	<u>9.9</u>	<u>10.0</u>		
10		<u>336.50</u>	<u>1.36</u>	<u>1.96</u>	<u>78</u>	<u>308</u>								
11		<u>340.42</u>	<u>1.38</u>	<u>2.07</u>	<u>78</u>	<u>308</u>	<u>249</u>	<u>247</u>	<u>58</u>	<u>4.5</u>				
12		<u>344.40</u>	<u>1.39</u>	<u>2.12</u>	<u>79</u>	<u>308</u>								

A. Lanfranco and Associates Inc.

Client Metro Van WTE

Source Unit 2

Date 4 Feb 2026

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)	30.26	30.26	30.26		
Canister Number	SC01486	SC01545	SC02285		
Controller Number	0A01175	0A01175	0A01175		
Gauge Number					
Initial: Start Time	10:00	11:15	12:20		
Flask Vac. (in. Hg)	-28	-27.5	-27		
Final: End Time	11:00	12:15	13:20		
Flask Vac. (in. Hg)	-10	-18	-5		

Source Unit 3

Date 5 Feb 2026

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number	SC00778	SC00369	SC01652		
Controller Number	0A00014	0A00014	0A00014		
Gauge Number					
Initial: Start Time	10:45	11:55	13:05		
Flask Vac. (in. Hg)	-30	-29	-30		
Final: End Time	11:45	12:55	14:05		
Flask Vac. (in. Hg)	-5	-10	-12		

Source Unit 3

Date 5 Feb 2026

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number	SC00369				
Controller Number	0A00014				
Gauge Number					
Initial: Start Time	11:55				
Flask Vac. (in. Hg)	-29				
Final: End Time	12:55				
Flask Vac. (in. Hg)	-10				

Source Unit 3

Date 5 Feb 2026

	Run 1	Run 2	Run 3	Run 4	Run 5
Pbar (in. Hg)					
Canister Number	SC01652				
Controller Number	0A00014				
Gauge Number					
Initial: Start Time	13:05				
Flask Vac. (in. Hg)	-30				
Final: End Time	14:05				
Flask Vac. (in. Hg)					

APPENDIX – F

CALIBRATION SHEETS and

TECHNICIAN CERTIFICATES

A.Lanfranco & Associates inc.

EPA Method 5

Meter Box Calibration

English Meter Box Units, English K' Factor

Model #: AU 15
Serial #: 0028SPC-081915-1

Date: 8-Jan-26
Barometric Pressure: 30.07 (in. Hg)
Theoretical Critical Vacuum: 14.18 (in. Hg)

!!!!!!!
IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)³/(deg R)^{0.5}/((in.Hg)^{0.5}(min)).
!!!!!!!

----- DRY GAS METER READINGS -----									-CRITICAL ORIFICE READINGS-					
dH (in H2O)	Time (min)	Volume Initial (cu ft)	Volume Final (cu ft)	Volume Total (cu ft)	Initial Temps. Inlet (deg F)	Initial Temps. Outlet (deg F)	Final Temps. Inlet (deg F)	Final Temps. Outlet (deg F)	Orifice Serial# (number)	K' Orifice Coefficient (see above)	Actual Vacuum (in Hg)	-- Ambient Temperature -- Initial (deg F) Final (deg F) Average (deg F)		
3.50	15.00	58.281	74.047	15.766	62.0	62.0	66.0	66.0	73	0.8185	15.0	73.0	78.0	75.5
1.80	15.00	74.047	85.554	11.507	67.0	67.0	70.0	70.0	63	0.5956	18.0	79.0	81.0	80.0
1.10	15.00	85.554	94.544	8.990	70.0	70.0	73.0	73.0	55	0.4606	19.8	77.0	80.0	78.5
0.60	15.00	94.544	101.406	6.862	73.0	73.0	75.0	75.0	48	0.3560	21.0	77.0	85.0	81.0
0.29	15.00	101.406	106.145	4.739	75.0	75.0	76.0	76.0	40	0.2408	22.0	81.0	86.0	83.5

***** RESULTS *****													
--- DRY GAS METER ---			----- ORIFICE -----			-- DRY GAS METER --			----- ORIFICE -----				
VOLUME CORRECTED	VOLUME CORRECTED		VOLUME CORRECTED	VOLUME CORRECTED	VOLUME NOMINAL	CALIBRATION FACTOR Y			CALIBRATION FACTOR dH@				
Vm(std) (cu ft)	Vm(std) (liters)		Vcr(std) (cu ft)	Vcr(std) (liters)	Vcr (cu ft)	Value (number)	Variation (number)		Value (in H2O)	Value (mm H2O)	Variation (in H2O)	Ko (value)	
16.096	455.8		15.954	451.8	16.106	0.991	-0.006		1.762	44.77	0.075	0.725	
11.600	328.5		11.561	327.4	11.769	0.997	-0.001		1.711	43.47	0.024	0.733	
8.996	254.8		8.953	253.5	9.089	0.995	-0.002		1.734	44.05	0.047	0.730	
6.826	193.3		6.904	195.5	7.041	1.011	0.014		1.583	40.22	-0.104	0.753	
4.697	133.0		4.659	131.9	4.774	0.992	-0.005		1.647	41.83	-0.041	0.753	
Average Y----->						0.9972		Average dH@----->	1.688	42.9		Average Ko----->	0.739

TEMPERATURE CALIBRATION										
Calibration Standard ----->			Omega Model CL23A S/N:T-218768							
Reference Set-Point (deg F)	Stack (deg F)	(% diff)	Hot Box (deg F)	(% diff)	Probe (deg F)	(% diff)	Imp Out (deg F)	(% diff)	Aux (deg F)	(% diff)
32	33	0.20%	32	0.00%	31	-0.20%	32	0.00%	33	0.20%
100	100	0.00%	100	0.00%	99	-0.18%	100	0.00%	100	0.00%
300	300	0.00%	300	0.00%	299	-0.13%	300	0.00%	300	0.00%
500	498	-0.21%	500	0.00%	498	-0.21%	500	0.00%	500	0.00%
1000	998	-0.14%	999	-0.07%	998	-0.14%	999	-0.07%	999	-0.07%

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +/-0.02.
For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H2O that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +/-0.2.
For Temperature Device, the reading must be within 1.5% of certified calibration standard (absolute temperature) to be acceptable.

Calibrated by: Christian De La O

Signature: 

Date: January 8, 2026

A.Lanfranco & Associates inc.

EPA Method 5

Meter Box Calibration

English Meter Box Units, English K' Factor

Model #: CAE AL1
Serial #: 0028-070611-1

Date: 8-Jan-26
Barometric Pressure: 30.00 (in. Hg)
Theoretical Critical Vacuum: 14.15 (in. Hg)

!!!!!!!
IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)³/(deg R)^{0.5}/((in.Hg)³(min)).
!!!!!!!

----- DRY GAS METER READINGS -----									-CRITICAL ORIFICE READINGS-					
dH (in H2O)	Time (min)	Volume Initial (cu ft)	Volume Final (cu ft)	Volume Total (cu ft)	Initial Temps.		Final Temps.		Orifice Serial# (number)	K' Orifice Coefficient (see above)	Actual Vacuum (in Hg)	-- Ambient Temperature --		
					Inlet (deg F)	Outlet (deg F)	Inlet (deg F)	Outlet (deg F)				Initial (deg F)	Final (deg F)	Average (deg F)
3.80	15.00	511.618	528.258	16.640	61.0	61.0	61.0	61.0	73	0.8185	16.5	60.0	57.0	58.5
2.00	15.00	528.403	540.443	12.040	61.0	61.0	70.0	65.0	63	0.5956	18.8	58.0	56.0	57.0
1.20	15.00	540.443	549.789	9.346	63.0	63.0	64.0	64.0	55	0.4606	20.5	56.0	55.0	55.5
0.68	15.00	549.789	556.988	7.199	64.0	64.0	65.0	65.0	48	0.3560	21.5	56.0	56.0	56.0
0.31	16.50	556.988	562.416	5.428	66.0	66.0	67.0	67.0	40	0.2408	23.0	61.0	62.0	61.5

***** RESULTS *****										
--- DRY GAS METER ---		----- ORIFICE -----			-- DRY GAS METER --		----- ORIFICE -----			
VOLUME CORRECTED	VOLUME CORRECTED	VOLUME CORRECTED	VOLUME CORRECTED	VOLUME NOMINAL	CALIBRATION FACTOR Y		CALIBRATION FACTOR dH@			
Vm(std) (cu ft)	Vm(std) (liters)	Vcr(std) (cu ft)	Vcr(std) (liters)	Vcr (cu ft)	Value (number)	Variation (number)	Value (in H2O)	Value (mm H2O)	Variation (in H2O)	Ko (value)
17.059	483.1	16.175	458.1	15.848	0.948	-0.012	1.868	47.44	0.057	0.709
12.213	345.9	11.788	333.8	11.516	0.965	0.005	1.844	46.84	0.033	0.704
9.476	268.3	9.129	258.5	8.893	0.963	0.003	1.843	46.81	0.032	0.705
7.276	206.0	7.052	199.7	6.877	0.969	0.009	1.747	44.36	-0.064	0.720
5.460	154.6	5.220	147.8	5.144	0.956	-0.004	1.752	44.50	-0.059	0.729
Average Y----->					0.9604	Average dH@----->	1.811	46.0	Average Ko----->	0.713

TEMPERATURE CALIBRATION									
Calibration Standard -----> Omega Model CL23A S/N:T-218768									
Reference Set-Point	Stack		Hot Box		Temperature Device Reading Probe		Imp Out		Aux
(deg F)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F) (% diff)
32	32	0.00%	35	0.61%	35	0.61%	32	0.00%	32 0.00%
100	101	0.18%	103	0.54%	103	0.54%	100	0.00%	100 0.00%
300	300	0.00%	302	0.26%	304	0.53%	300	0.00%	300 0.00%
500	500	0.00%	502	0.21%	504	0.42%	499	-0.10%	500 0.00%
1000	999	-0.07%	1001	0.07%	1004	0.27%	999	-0.07%	999 -0.07%

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +0.02.
For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H2O that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +0.2.
For Temperature Device, the reading must be within 1.5% of certified calibration standard (absolute temperature) to be acceptable.

Calibrated by: Christian De La O

Signature: 

Date: January 8, 2026

A.Lanfranco & Associates inc.

EPA Method 5

Meter Box Calibration

English Meter Box Units, English K' Factor

Model #: JU 14
Serial #: 0028-030615-1

Date: 9-Jan-26
Barometric Pressure: 30.33 (in. Hg)
Theoretical Critical Vacuum: 14.31 (in. Hg)

!!!!!!!

IMPORTANT

IMPORTANT

!!!!!!!

For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
The Critical Orifice Coefficient, K', must be entered in English units, (ft)³/(deg R)^{0.5}/((in.Hg)*(min)).

----- DRY GAS METER READINGS -----										-CRITICAL ORIFICE READINGS-					
dH (in H2O)	Time (min)	Volume Initial (cu ft)	Volume Final (cu ft)	Volume Total (cu ft)	Initial Temps. Inlet (deg F)	Initial Temps. Outlet (deg F)	Final Temps. Inlet (deg F)	Final Temps. Outlet (deg F)		Orifice Serial# (number)	K' Orifice Coefficient (see above)	Actual Vacuum (in Hg)	-- Ambient Temperature -- Initial (deg F)	Final (deg F)	Average (deg F)
4.20	15.00	801.658	817.313	15.655	66.0	66.0	67.0	67.0		73	0.8185	16.0	65.0	72.0	68.5
2.20	15.00	817.313	828.791	11.478	67.0	67.0	69.0	69.0		63	0.5956	19.0	69.0	74.0	71.5
1.35	15.00	828.791	837.527	8.736	69.0	69.0	71.0	71.0		55	0.4606	21.0	76.0	77.0	76.5
0.76	15.00	837.527	844.265	6.738	69.0	71.0	69.0	73.0		48	0.3560	22.0	75.0	80.0	77.5
0.36	15.00	844.265	848.913	4.648	68.0	73.0	69.0	74.0		40	0.2408	23.0	78.0	80.0	79.0

***** RESULTS *****											
--- DRY GAS METER ---			----- ORIFICE -----			-- DRY GAS METER --			----- ORIFICE -----		
VOLUME CORRECTED Vm(std) (cu ft)	VOLUME CORRECTED Vm(std) (liters)		VOLUME CORRECTED Vcr(std) (cu ft)	VOLUME CORRECTED Vcr(std) (liters)	VOLUME NOMINAL Vcr (cu ft)	CALIBRATION FACTOR Y			CALIBRATION FACTOR dH@		
						Value (number)	Variation (number)		Value (in H2O)	Value (mm H2O)	Ko (value)
16.070	455.1		16.198	458.7	16.001	1.008	-0.006		2.060	52.31	0.670
11.693	331.1		11.753	332.9	11.676	1.005	-0.009		2.043	51.90	0.676
8.848	250.6		9.047	256.2	9.072	1.023	0.009		2.108	53.55	0.655
6.808	192.8		6.986	197.8	7.018	1.026	0.012		1.983	50.37	0.672
4.687	132.7		4.719	133.6	4.754	1.007	-0.007		2.053	52.14	0.672
Average Y----->						1.0137		Average dH@----->	2.049	52.1	Average Ko-----> 0.669

TEMPERATURE CALIBRATION											
Calibration Standard ----->			Omega Model CL23A S/N:T-218768								
Reference Set-Point (deg F)	Stack		Hot Box		Temperature Device Reading Probe		Imp Out		Aux		
(deg F)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F)	(% diff)	(deg F)	(% diff)	
32	33	0.20%	31	-0.20%	30	-0.41%	34	0.41%	33	0.20%	
100	101	0.18%	100	0.00%	98	-0.36%	102	0.36%	102	0.36%	
300	302	0.26%	299	-0.13%	298	-0.26%	301	0.13%	302	0.26%	
500	501	0.10%	499	-0.10%	498	-0.21%	501	0.10%	501	0.10%	
1000	1001	0.07%	999	-0.07%	998	-0.14%	1001	0.07%	1001	0.07%	

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +/-0.02.

For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H2O that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +/-0.2.

For Temperature Device, the reading must be within 1.5% of certified calibration standard (absolute temperature) to be acceptable.

Calibrated by: Christian De La O

Signature: 

Date: January 9, 2026

A. Lanfranco & Associates Inc.

EPA Method 5
Meter Box Calibration
English Meter Box Units, English K' Factor

Model #: **LMU-C**
Serial #: **Wizit 4615**

Date: **6-Jan-26**
Barometric Pressure: **29.49** (in. Hg)
Theoretical Critical Vacuum: **13.91** (in. Hg)

!!!!!!!

IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)³/(deg R)^{0.5}/(in.Hg)²(min)).
!!!!!!!

----- DRY GAS METER READINGS -----									-CRITICAL ORIFICE READINGS-					
dH (in H2O)	Time (min)	Volume Initial (m ³)	Volume Final (m ³)	Volume Total (cu ft)	Initial Temps.		Final Temps.		Orifice Serial# (number)	K' Orifice Coefficient (see above)	Actual Vacuum (in Hg)	-- Ambient Temperature --		
					Inlet (deg F)	Outlet (deg F)	Inlet (deg F)	Outlet (deg F)				Initial (deg F)	Final (deg F)	Average (deg F)
0.00	15.00	196.758	196.950	6.805	65.0	65.0	67.0	67.0	48	0.3560	20.0	65.0	64.0	64.5
0.00	15.00	196.950	197.143	6.812	66.0	66.0	67.0	67.0	48	0.3560	20.0	64.0	65.0	64.5
0.00	15.00	197.143	197.337	6.851	67.0	67.0	67.0	67.0	48	0.3560	20.0	65.0	62.0	63.5

***** RESULTS *****											
--- DRY GAS METER ---			----- ORIFICE -----			-- DRY GAS METER --			----- ORIFICE -----		
VOLUME CORRECTED	VOLUME CORRECTED		VOLUME CORRECTED	VOLUME CORRECTED	VOLUME NOMINAL	CALIBRATION FACTOR Y			CALIBRATION FACTOR dH@		
Vm(std) (cu ft)	Vm(std) (liters)		Vcr(std) (cu ft)	Vcr(std) (liters)	Vcr (cu ft)	Value (number)	Variation (number)		Value (in H2O)	Value (mm H2O)	Variation (in H2O)
6.730	190.6		6.876	194.7	6.933	1.022	0.001		0.000	0.00	0.000
6.731	190.6		6.876	194.7	6.933	1.022	0.001		0.000	0.00	0.000
6.763	191.5		6.883	194.9	6.926	1.018	-0.003		0.000	0.00	0.000
Average Y----->						1.0203		Average dH@----->	0.0000	0.00	

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +/-0.02.

For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H2O that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +/-0.2.

For Temperature Devices, the reading must be within 1.5% of certified calibration standard (absolute temperature) to be acceptable.

Calibrated by: Christian De La O

Signature: 

Date: January 6, 2026

A. LANFRANCO and ASSOCIATES INC.

ENVIRONMENTAL CONSULTANTS

GLASS NOZZLE DIAMETER CALIBRATION FORM

Calibrated by: Christian De La O

Date: 05-Jan-26

Signature:



Nozzle I.D.	d1	d2	d3	difference	average dia.	average area
	(inch)	(inch)	(inch)	(inch)	(inch)	(ft ²)
A	0.1270	0.1270	0.1255	0.0015	0.1265	0.0000873
G-165	0.1650	0.1660	0.1645	0.0015	0.1652	0.0001488
G-170	0.1700	0.1710	0.1695	0.0015	0.1702	0.0001579
G-178	0.1809	0.1799	0.1792	0.0017	0.1800	0.0001767
J	0.1881	0.1884	0.1874	0.0010	0.1880	0.0001927
Q	0.2030	0.2040	0.2050	0.0020	0.2040	0.0002270
L	0.2100	0.2070	0.2090	0.0030	0.2087	0.0002375
P-2240	0.2160	0.2155	0.2170	0.0015	0.2162	0.0002549
P-224	0.2160	0.2170	0.2150	0.0020	0.2160	0.0002545
G-221	0.2160	0.2185	0.2190	0.0030	0.2178	0.0002588
G-2232	0.2210	0.2200	0.2215	0.0015	0.2208	0.0002660
P-223	0.2297	0.2296	0.2298	0.0002	0.2297	0.0002878
C-250	0.2500	0.2500	0.2500	0.0000	0.2500	0.0003409
P-250	0.2455	0.2470	0.2480	0.0025	0.2468	0.0003323
P-254	0.2510	0.2511	0.2498	0.0013	0.2506	0.0003426
P-256	0.2520	0.2510	0.2515	0.0010	0.2515	0.0003450
C-280	0.2790	0.2795	0.2805	0.0015	0.2797	0.0004266
C-281	0.2800	0.2820	0.2780	0.0040	0.2800	0.0004276
C-282	0.2800	0.2800	0.2800	0.0000	0.2800	0.0004276
C-283	0.2800	0.2800	0.2800	0.0000	0.2800	0.0004276
G-2825	0.2780	0.2762	0.2775	0.0018	0.2772	0.0004192
G-304	0.3038	0.3028	0.3035	0.0010	0.3034	0.0005020
G-3121	0.3055	0.3063	0.3070	0.0015	0.3063	0.0005116
P-307	0.3070	0.3065	0.3075	0.0010	0.3070	0.0005140
G-309				0.0000	#DIV/0!	#DIV/0!
G-3092	0.3100	0.3085	0.3090	0.0015	0.3092	0.0005213
P-311	0.3105	0.3115	0.3110	0.0010	0.3110	0.0005275
P-314	0.3135	0.3135	0.3140	0.0005	0.3137	0.0005366
P-315	0.3145	0.3145	0.3145	0.0000	0.3145	0.0005395
V-06	0.3210	0.3200	0.3200	0.0010	0.3203	0.0005597
P-34	0.3430	0.3430	0.3430	0.0000	0.3430	0.0006417
343-GS	0.3430	0.3430	0.3430	0.0000	0.3430	0.0006417
P-343	0.3425	0.3420	0.3425	0.0005	0.3423	0.0006392
G-345	0.3470	0.3475	0.3475	0.0005	0.3473	0.0006580
G-349	0.3655	0.3659	0.3665	0.0010	0.3660	0.0007305
G-367	0.3680	0.3660	0.3665	0.0020	0.3668	0.0007339
G-372	0.3681	0.3681	0.3682	0.0001	0.3681	0.0007392
P-375	0.3705	0.3710	0.3709	0.0005	0.3708	0.0007499
C-3751	0.3675	0.3672	0.3673	0.0003	0.3673	0.0007359
P-38	0.3750	0.3750	0.3750	0.0000	0.3750	0.0007670
P-401	0.3980	0.3990	0.4000	0.0020	0.3990	0.0008683
P-405	0.4047	0.4055	0.4056	0.0009	0.4053	0.0008958
P-407	0.4065	0.4070	0.4072	0.0007	0.4069	0.0009030
P-406	0.4058	0.4062	0.4060	0.0004	0.4060	0.0008990
P-41	0.4060	0.4060	0.4060	0.0000	0.4060	0.0008990
G-437	0.4277	0.4264	0.4265	0.0013	0.4269	0.0009938
G-433	0.4360	0.4360	0.4355	0.0005	0.4358	0.0010360
P-47	0.4680	0.4680	0.4680	0.0000	0.4680	0.0011946
P-29	0.4681	0.4683	0.4685	0.0004	0.4683	0.0011961
G-468	0.4700	0.4685	0.4720	0.0035	0.4702	0.0012057
P-7	0.4965	0.4945	0.4975	0.0030	0.4962	0.0013427
G-540	0.5390	0.5402	0.5395	0.0012	0.5396	0.0015879

(a) D1, D2, D3 = three different nozzle diameters; each diameter must be measured to within (0.025mm) 0.001 in.

(b) Difference = maximum difference between any two diameters; must be less than or equal to (0.1mm) 0.004 in.

(c) Average = average of D1, D2 and D3

Nozzles highlighted in blue are out for repair

Nozzles highlighted in yellow are due calibration

Pitot Tube Calibration

Date: 6-Jan-26
Pbar (in.Hg): 29.64

Temp (R): 528
Dn (in.): 0.25

Pitot ID: **7A-1**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.110	0.150	22.0	0.8478	0.0034
0.230	0.310	31.8	0.8527	0.0016
0.360	0.480	39.8	0.8574	0.0062
0.430	0.585	43.5	0.8488	0.0024
0.640	0.870	53.1	0.8491	0.0020
Average :			0.8512	0.0031

Pitot ID: **ST 8A**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
		0.0	#DIV/0!	#DIV/0!
		0.0	#DIV/0!	#DIV/0!
		0.0	#DIV/0!	#DIV/0!
		0.0	#DIV/0!	#DIV/0!
		0.0	#DIV/0!	#DIV/0!
Average :			#DIV/0!	#DIV/0!

Pitot ID: **7B**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.140	0.195	24.8	0.8388	0.0048
0.270	0.360	34.5	0.8574	0.0137
0.430	0.595	43.5	0.8416	0.0021
0.560	0.790	49.7	0.8335	0.0101
0.710	0.970	55.9	0.8470	0.0033
Average :			0.8437	0.0068

Pitot ID: **ST 8B**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.095	0.130	20.5	0.8463	0.0045
0.220	0.300	31.1	0.8478	0.0031
0.330	0.450	38.1	0.8478	0.0031
0.455	0.610	44.8	0.8550	0.0042
0.660	0.880	53.9	0.8574	0.0065
Average :			0.8509	0.0043

Pitot ID: **7 AL GVRD**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.145	0.205	25.3	0.8326	0.0020
0.265	0.370	34.2	0.8378	0.0032
0.400	0.565	42.0	0.8330	0.0017
0.570	0.800	50.1	0.8357	0.0010
0.710	1.000	55.9	0.8342	0.0005
Average :			0.8347	0.0017

Pitot ID: **ST 8C**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.190	0.270	28.9	0.8305	0.0051
0.275	0.390	34.8	0.8313	0.0043
0.350	0.495	39.3	0.8325	0.0031
0.440	0.610	44.0	0.8408	0.0052
0.580	0.800	50.6	0.8430	0.0073
Average :			0.8356	0.0050

Pitot ID: **7C**

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
0.170	0.230	27.4	0.8511	0.0020
0.260	0.350	16.3	0.8533	0.0041
0.435	0.585	43.8	0.8537	0.0045
0.575	0.790	30.5	0.8446	0.0046
0.660	0.910	47.0	0.8431	0.0060
Average :			0.8492	0.0042

Pitot ID:

Reference Pitot (in H2O)	S-Type Pitot (in H2O)	Air Velocity (ft/s)	Pitot Coeff. Cp	Deviation (absolute)
Average :				

* Average absolute deviation must not exceed 0.01

Calibrated by: Jack Dennis

Signature: _____



Date: January 6, 2026

BAROMETER CALIBRATION FORM

Device	Cal Date	Pbar Env Canada		Device (inches of Hg)		Difference
		(kPa)	(inches of Hg)	Reading	Elevation Corrected	(Env Can - Elv Corr)
LA	6-Jan-26	100.4	29.65	29.54	29.61	0.04
DS	6-Jan-26	100.4	29.65	29.52	29.59	0.06
CL	6-Jan-26	100.4	29.65	29.53	29.60	0.05
JC	6-Jan-26	100.4	29.65	29.51	29.58	0.07
LF	6-Jan-26	100.4	29.65	29.53	29.60	0.05
SV	6-Jan-26	100.4	29.65	29.56	29.63	0.02
CDO	6-Jan-26	100.4	29.65	29.51	29.58	0.07
JG	6-Jan-26	100.4	29.65	29.53	29.60	0.05
JD	6-Jan-26	100.4	29.65	29.50	29.57	0.08
BB	6-Jan-26	100.4	29.65	29.59	29.66	-0.01

Calibrated by: Christian De La O

Signature:



Date:

06-Jan-26

Performance Specification is

Device Corrected for Elevation must be +/- 0.1 " Hg of ENV CANADA SEA-LEVEL Pbar

Enter Environment Canada Pressure from their website for Vancouver (link below)
and the reading from your barometer on the ground floor of the office.

https://weather.gc.ca/city/pages/bc-74_metric_e.html

TEMPERATURE CALIBRATION FORM

Signature:

TEMPERATURE DEVICE CALIBRATIONS

Reference Device Model CL23A Calibrator			Temperature Settings (degrees F)													
			32		100		200		300		500		800		1700	
Device	ALA #	Serial #	Reading	Variation	Reading	Variation	Reading	Variation	Reading	Variation	Reading	Variation	Reading	Variation	Reading	Variation
TPI 341K	7	20314590036	30.7	-0.26%	98.2	-0.32%	197.9	-0.32%	297.6	-0.32%	496.8	-0.33%	796.2	-0.30%	1693	-0.32%
TPI 341K	8	20313490047	30.7	-0.26%	99.0	-0.18%	198.6	-0.21%	298.2	-0.24%	497.9	-0.22%	797.2	-0.22%	1695	-0.23%
TPI 341K	11	20345510024	31.8	-0.04%	99.8	-0.04%	199.3	-0.11%	299.0	-0.13%	498.4	-0.17%	798.0	-0.16%	1696	-0.19%
TPI 341K	12	20345510031	32.3	0.06%	99.5	-0.09%	199.4	-0.09%	299.5	-0.07%	499.2	-0.08%	798.5	-0.12%	1696	-0.19%
TPI 341K	20	20329480013	30.2	-0.37%	98.5	-0.27%	198.4	-0.24%	298.1	-0.25%	497.7	-0.24%	797.7	-0.18%	1697	-0.14%
TPI 341K	22	20329480041	31.3	-0.14%	98.6	-0.25%	198.6	-0.21%	298.4	-0.21%	497.9	-0.22%	797.4	-0.21%	1696	-0.19%
TPI 341K	24	20142030017	31.1	-0.18%	99.2	-0.14%	199.3	-0.11%	299.2	-0.11%	498.9	-0.11%	798.6	-0.11%	1697	-0.14%
TPI 341K	26	20345510036	30.7	-0.26%	99.0	-0.18%	198.7	-0.20%	298.4	-0.21%	498.1	-0.20%	798.0	-0.16%	1697	-0.14%
TPI 341K	28	20142030009	31.1	-0.18%	99.0	-0.18%	198.8	-0.18%	299.2	-0.11%	498.9	-0.11%	798.9	-0.09%	1697	-0.14%
TPI 341K	30	20345510023	31.6	-0.08%	99.5	-0.09%	198.9	-0.17%	299.1	-0.12%	498.5	-0.16%	798.0	-0.16%	1696	-0.19%
TPI 341K	32	20142030028	31.3	-0.14%	99.3	-0.13%	199.1	-0.14%	298.8	-0.16%	498.6	-0.15%	798.4	-0.13%	1697	-0.14%
Reference device is a NIST certified digital thermocouple calibrator																
Variation expressed as a percentage of the absolute temperature must be within 1.5 %																

Calibration Certificate

Date: 15-Jan-26
Calibrated by: Liam Forrer
Authorizing Signature: _____

Insrtument Calibrated: Testo 1 (330-2LL)
Serial #: 03101345
Customer: ALA

Ambient Conditions: Temperature: 10 °C Barometric Pressure: 103 kPa Relative Humidity: 85%
A. Lanfranco and Associates Inc. certifies that the described instrument has been inspected and tested following calibration procedures in the Environment Canada Report EPS 1/PG/7 (Revised 2005). Below are the observed readings after calibrations are complete. Calibration checks should be completed at least every 6 months.

O ₂ Gas	Initial Evaluation				After Calibration				Certified Value (vol %)
	Instrument Reading (vol %)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (vol %)	% Calibration Error	Pass/Fail	Notes	
Zero	0.2	0.20	Pass		0.2	0.20	Pass		0
O ₂	11.1	0.19	Pass		11.1	0.19	Pass		10.91
Ambient	20.9	0.05	Pass		20.9	0.05	Pass		20.95

Performance Specification: +/- 1% O₂ (absolute diff)

CO Gas	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	925	2.9%	Pass		927	2.7%	Pass		952.9
2 Gas	489	0.9%	Pass		490	0.7%	Pass		493.3
3 Gas	246	1.0%	Pass		245	0.6%	Pass		243.5

Performance Specification: +/- 5% of Certified Gas Value

NO Gas	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	246	1.4%	Pass		252	1.0%	Pass		249.6
2 Gas	93	6.4%	Fail		87	0.5%	Pass		87.4
3 Gas	47	6.1%	Fail		45	1.6%	Pass		44.3

Performance Specification: +/- 5% of Certified Gas Value

NIST Traceable Calibration Gases:

Cylinder	Cylinder ID Number	Certification Date	Expiration Date	Cylinder Pressure (PSI)	O ₂ (Vol. %)	CO (ppm)	NO (ppm)
Zero Gas (N ₂)	72Y	05/02/2025	05/02/2030	1400	0	0	0
1 Gas	K2H	05/22/2024	05/22/2032	1050	0	952.9	249.6
2 Gas	DK8	09/16/2025	09/16/2033	1400	0	493.3	87.4
3 Gas	UHE	05/30/2025	05/30/2028	600	0	243.5	44.3
O ₂ /CO ₂	LD9	07/07/2025	07/07/2033	1000	10.91	0	0

Note: National Institute of Standards and Technology traceable certificates are available upon request.

Calibration Certificate

Date: 15-Jan-26
Calibrated by: Liam Forrer
Authorizing Signature:

Insrtument Calibrated: Testo 2 (330-2LX)
Serial #: 03282252
Customer: ALA

Ambient Conditions: Temperature: 8 °C Barometric Pressure: 103 kPa Relative Humidity: 85%

A. Lanfranco and Associates Inc. certifies that the described instrument has been inspected and tested following calibration procedures in the Environment Canada Report EPS 1/PG/7 (Revised 2005). Below are the observed readings after calibrations are complete. Calibration checks should be completed at least every 6 months.

O ₂	Initial Evaluation				After Calibration				Certified Value (vol %)
	Instrument Reading (vol %)	Calibration Error	Pass/Fail	Notes	Instrument Reading (vol %)	Calibration Error	Pass/Fail	Notes	
Zero	0.1	0.10	Pass		0.1	0.10	Pass		0
O ₂	11.1	0.19	Pass		11.1	0.19	Pass		10.91
Ambient	20.9	0.06	Pass		20.9	0.06	Pass		20.96

Performance Specification: +/- 1% O₂ (absolute diff)

CO	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	962	1.0%	Pass		939	1.5%	Pass		952.9
2 Gas	492	0.3%	Pass		493	0.1%	Pass		493.3
3 Gas	247	1.4%	Pass		247	1.4%	Pass		243.5

Performance Specification: +/- 5% of Certified Gas Value

NO	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	248	0.6%	Pass		248	0.6%	Pass		249.6
2 Gas	92	5.3%	Fail		88	0.7%	Pass		87.4
3 Gas	47	6.1%	Fail		45	1.6%	Pass		44.3

Performance Specification: +/- 5% of Certified Gas Value

NIST Traceable Calibration Gases:

Cylinder	Cylinder ID Number	Certification Date	Expiration Date	Cylinder Pressure (PSI)	O ₂ (Vol. %)	CO (ppm)	NO (ppm)
Zero Gas (N ₂)	72Y	05/02/2025	05/02/2030	1400	0	0	0
1 Gas	K2H	05/22/2024	05/22/2032	1050	0	952.9	249.6
2 Gas	DK8	09/16/2025	09/16/2033	1400	0	493.3	87.4
3 Gas	UHE	05/30/2025	05/30/2028	600	0	243.5	44.3
O ₂ /CO ₂	LD9	07/07/2025	07/07/2033	1000	10.91	0	0

Note: National Institute of Standards and Technology traceable certificates are available upon request.

Calibration Certificate

Date: 15-Jan-26
 Calibrated by: Liam Forrer
 Authorizing Signature: Liam Forrer

Instrument Calibrated: Testo 3 (340)
 Serial #: 64057016
 Customer: ALA

Ambient Conditions: Temperature: 8 °C Barometric Pressure: 102.1 kPa Relative Humidity: 77%
 A. Lanfranco and Associates Inc. certifies that the described instrument has been inspected and tested following calibration procedures in the Environment Canada Report EPS 1/PG/7 (Revised 2005). Below are the observed readings after calibrations are complete. Calibration checks should be completed at least every 6 months.

O ₂ Gas	Initial Evaluation				After Calibration				Certified Value (vol %)
	Instrument Reading (vol %)	Calibration Error	Pass/Fail	Notes	Instrument Reading (vol %)	Calibration Error	Pass/Fail	Notes	
Zero	0.1	0.10	Pass		0.1	0.10	Pass		0
O ₂	11.1	0.19	Pass		11.1	0.19	Pass		10.91
Ambient	20.9	0.06	Pass		20.9	0.06	Pass		20.96

Performance Specification: +/- 1% O₂ (absolute diff)

CO Gas	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	947	0.6%	Pass		947	0.6%	Pass		952.9
2 Gas	504	2.2%	Pass		500	1.4%	Pass		493.3
3 Gas	255	4.7%	Pass		250	2.7%	Pass		243.5

Performance Specification: +/- 5% of Certified Gas Value

NO Gas	Initial Evaluation				After Calibration				Certified Value (ppm)
	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	Instrument Reading (ppm)	% Calibration Error	Pass/Fail	Notes	
Zero	0	0.0%	Pass		0	0.0%	Pass		0
1 Gas	249	0.2%	Pass		249	0.2%	Pass		249.6
2 Gas	87	0.5%	Pass		87	0.5%	Pass		87.4
3 Gas	44	0.7%	Pass		44	0.7%	Pass		44.3

Performance Specification: +/- 5% of Certified Gas Value

NIST Traceable Calibration Gases:

Cylinder	Cylinder ID Number	Certification Date	Expiration Date	Cylinder Pressure (PSI)	O ₂ (Vol. %)	CO (ppm)	NO (ppm)
Zero Gas (N ₂)	72Y	05/02/2025	05/02/2030	1400	0	0	0
1 Gas	K2H	05/22/2024	05/22/2032	1050	0	952.9	249.6
2 Gas	DK8	09/16/2025	09/16/2033	1400	0	493.3	87.4
3 Gas	UHE	05/30/2025	05/30/2028	600	0	243.5	44.3
O ₂ /CO ₂	LD9	07/07/2025	07/07/2033	1000	10.91	0	0

Note: National Institute of Standards and Technology traceable certificates are available upon request.



MOUNT ROYAL COLLEGE

Faculty of Continuing Education and Extension

Daryl Sampson

has successfully completed

The program of studies and is awarded the certificate in

STACK SAMPLING

May 2005

Date

Donna Spaulding

Dean

Faculty of Continuing Education and Extension

Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

- a) an ownership interest in the regulated person's business;
- b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);
- c) a personal or professional interest in a specific outcome;
- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
- f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

Qualified professionals who work under ministry legislation must take care in the conduct of their work that potential conflicts of interest within their control are avoided or mitigated. Precise rules in conflict of interest are not possible and professionals must rely on guidance of their professional associations, their common sense, conscience and sense of personal integrity.

Declaration

I Daryl Sampson, as a member of Air and Waste Management Association
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

This conflict of interest disclosure statement is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Signature:

X Daryl Sampson

Print name: Daryl Sampson

Date: Dec.18, 2020

Witnessed by:

X 

Print name: Mark Lanfranco

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

The Ministry of Environment and Climate Change Strategy relies on the work, advice, recommendations and in some cases decision making of qualified professionals¹, under government's professional reliance regime. With this comes an assumption that professionals who undertake work in relation to ministry legislation, regulations and codes of practice have the knowledge, experience and objectivity necessary to fulfill this role.

1. Name of Qualified Professional Daryl Sampson

Title Senior Environmental Technician/Project Manager

2. Are you a registered member of a professional association in B.C.? ☐ Yes ☒ No

Name of Association: _____ Registration # _____

3. Brief description of professional services:

Environmental consulting, specializing in air and atmospheric sciences

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

X *Daryl Sampson*

Print Name: Daryl Sampson

Witnessed by:

X *Louis Agassiz*

Print Name: Louis Agassiz

Date signed: November 23, 2020

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

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- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Christian Gonzalo De La O

has successfully completed

Stack Sampling

The Faculty of Continuing Education
Mount Royal University

30 hours | May 1, 2024



Dimitra Fotopoulos, Vice Dean
Professional and Continuing Education

Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

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- b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);
- c) a personal or professional interest in a specific outcome;
- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
- f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

Qualified professionals who work under ministry legislation must take care in the conduct of their work that potential conflicts of interest within their control are avoided or mitigated. Precise rules in conflict of interest are not possible and professionals must rely on guidance of their professional associations, their common sense, conscience and sense of personal integrity.

Declaration

I Christian De La O, as a member of Air and Waste Management Association
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

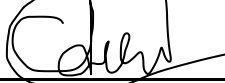
I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

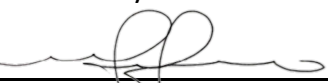
This conflict of interest disclosure statement is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Signature:

x 

Print name: Christian De La O

Witnessed by:

x 

Print name: Mark Lanfranco

Date: 29 August 2024

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

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1. Name of Qualified Professional Christian De La O
- Title Environmental Air Quality Technician
2. Are you a registered member of a professional association in B.C.? ☐ Yes ☒ No
- Name of Association: _____ Registration # _____
3. Brief description of professional services:
- Environmental consulting, specializing in air and atmospheric sciences
- _____

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

x 

Print Name: Christian De La O

Witnessed by:

x 

Print Name: Daryl Sampson

Date signed: 29 August 2024

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

MOUNT ROYAL UNIVERSITY

Faculty of Continuing Education and Extension

Jeremy Shawn Gibbs

has successfully completed

Stack Sampling

35 Hours / 2019

May 22, 2019

Date

BUM
Dean

Faculty of Continuing Education and Extension



Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

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- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
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Declaration

I Jeremy Gibbs, as a member of Air and Waste Management Association
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas

, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

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Signature:

X

Print name:

Jeremy G. B.S.S.

Witnessed by:

X

Print name:

Mark Lanfranco

Date: Dec. 16, 2020

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

The Ministry of Environment and Climate Change Strategy relies on the work, advice, recommendations and in some cases decision making of qualified professionals¹, under government's professional reliance regime. With this comes an assumption that professionals who undertake work in relation to ministry legislation, regulations and codes of practice have the knowledge, experience and objectivity necessary to fulfill this role.

1. Name of Qualified Professional

Title

Jeremy Gibbs
Environmental technician

2. Are you a registered member of a professional association in B.C.?

☐ Yes ☒ No

Name of Association: _____ Registration # _____

3. Brief description of professional services:

Environmental Consultant Specialize in air and
atmospheric sciences

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Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

X

Print Name:

Jeremy Gibbs
Nov 1, 2020

Witnessed by:

X

Print Name:

Connor Laan

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Justin Ching

has successfully completed

Stack Sampling

The Faculty of Continuing Education
Mount Royal University

30 hours | May 26, 2023



Dimitra Fotopoulos, Vice Dean
Professional and Continuing Education

Conflict of Interest Disclosure Statement

A qualified professional ¹ providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act*, the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

- a) an ownership interest in the regulated person's business;
- b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);
- c) a personal or professional interest in a specific outcome;
- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
- e) a spouse or other family member who will benefit from a specific outcome; or
- f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

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Declaration

I, Justin Ching, as a member of Air and Waste Management Association
declare

Select one of the following:

☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

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Signature:

x Justin Ching

Print name: Justin Ching

Date: June 28, 2023

Witnessed by:

x Mark Lanfranco

Print name: Mark Lanfranco

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

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1. Name of Qualified Professional Justin Ching
Title Environmental Technician
2. Are you a registered member of a professional association in B.C.? ☐ Yes ☒ No
Name of Association: _____ Registration # _____
3. Brief description of professional services:
Environmental Technician - specialising in air and atmospheric sciences

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Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

x Justin Ching

Print Name: Justin Ching

Witnessed by:

x Daryl Sampson

Print Name: Daryl Sampson

Date signed: June 28, 2023

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- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Liam Forrer

has successfully completed

Stack Sampling

The Faculty of Continuing Education
Mount Royal University

30 hours | May 26, 2023



Dimitra Fotopoulos, Vice Dean
Professional and Continuing Education

Conflict of Interest Disclosure Statement

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A real or perceived conflict of interest occurs when a qualified professional has

- a) an ownership interest in the regulated person's business;
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Declaration

I Liam Forrer, as a member of Air and Waste Management Association
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

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Signature:

x Liam Forrer

Print name: Liam Forrer

Date: July 12, 2023

Witnessed by:

x 

Print name: Mark Lanfranco

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- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Declaration of Competency

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1. Name of Qualified Professional Liam Forrer
Title Environmental Technician
2. Are you a registered member of a professional association in B.C.? ☐ Yes ☒ No
Name of Association: _____ Registration # _____
3. Brief description of professional services:
Environmental consulting, specializing in air and atmospheric sciences

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Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

x Liam Forrer

Print Name: Liam Forrer

Witnessed by:

x Daryl Sampson

Print Name: Daryl Sampson

Date signed: July 12, 2023

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Walter Smith & Associates, Inc.

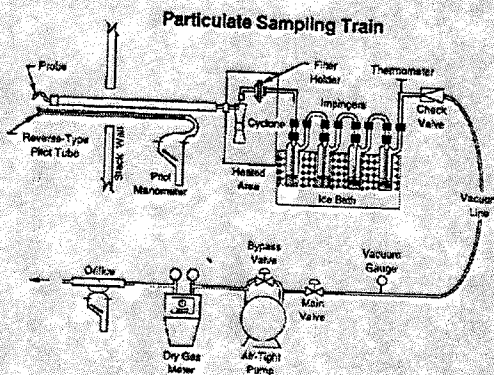
is hereby granted to:

Louis Agassiz

to certify that they have completed to satisfaction

Source Sampling & CEMS Workshop

Granted: March 11, 2011



Walter S. Smith

Walter S. Smith, PE, DEE 3.5 CEU

Conflict of Interest Disclosure Statement

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Declaration

I Louis Agassiz, as a member of ECO Canada
declare

Select one of the following:

☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

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Signature:

X 

Print name: Louis Agassiz

Witnessed by:

X 

Print name: Mark Lanfranco

Date: Jan. 4, 2026

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

- a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

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1. Name of Qualified Professional Louis Agassiz
Title Senior Environmental Technician/Project Manager
2. Are you a registered member of a professional association in B.C.? ☒ Yes ☐ No
Name of Association: Environmental Careers Organization of Canada Registration # 21689
3. Brief description of professional services:
Environmental consulting, specializing in air and atmospheric sciences

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Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

X 

Print Name: Louis Agassiz

Witnessed by:

X 

Print Name: Mark Lanfranco

Date signed: November 23, 2025

¹Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who

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- b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

Sean Verby

has successfully completed

Stack Sampling

The Faculty of Continuing Education
Mount Royal University

30 hours | May 1, 2024



Dimitra Fotopoulos, Vice Dean
Professional and Continuing Education

Conflict of Interest Disclosure Statement

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- d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;
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Declaration

I, Sean Verby, as a member of Air and Waste Management Association
declare

Select one of the following:

- ☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this project. I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to

Mr. Sajid Barlas, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

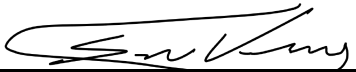
I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

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Signature:

X 

Print name: Sean Verby

Date: Sept, 4, 2024

Witnessed by:

X 

Print name: Mark Lanfranco

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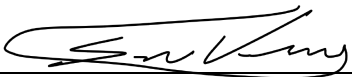
1. Name of Qualified Professional Sean Verby
Title Environmental Technician
2. Are you a registered member of a professional association in B.C.? ☐ Yes ☒ No
Name of Association: _____ Registration # _____
3. Brief description of professional services:
Environmental consulting, specializing in air and atmospheric sciences

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Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature:

X 

Print Name: Sean Verby

Witnessed by:

X 

Print Name: Daryl Sampson

Date signed: Sept, 4, 2024

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Canadian Association for Laboratory Accreditation Inc.

Certificate of Accreditation

A. Lanfranco and Associates Inc.
101 - 9488 - 189th Street
Surrey, British Columbia



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Accreditation No.: 1004232
Issued On: 5/15/2025
Accreditation Date: 2/5/2021
Expiry Date: 11/14/2027

A handwritten signature in black ink, appearing to read "K. McKinley", written over a thin horizontal line.

President and CEO



This certificate is the property of the Canadian Association for Laboratory Accreditation Inc. and must be returned on request; reproduction must follow policy in place at date of issue.
For the specific tests to which this accreditation applies, please refer to the laboratory's scope of accreditation at www.cala.ca.